

**P E N N S Y L V A N I A**

# **Occupational Outlook Handbook**

**2006  
Edition**

**Arts, Architecture, Recreation and Communication  
Hospitality, Tourism and Trade  
Volume 4 of 6**

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toll-free at 1-877-493-3282.

# How to Use the Pennsylvania Occupational Outlook Handbook

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The *Pennsylvania Occupational Outlook Handbook* is best used as a reference; it is not meant to be read in its entirety. Instead, look in the Table of Contents for specific occupations that interest you. For any occupation that sounds interesting, use the *Handbook* to learn about the type of work, education and training requirements, advancement possibilities, earnings, job outlook, and related occupations. Each occupational description follows a standard format, making it easy for you to compare occupations.

This document provides an overview of how the occupational articles are organized in the *Handbook*. It highlights information presented in each section and offers tips on how to interpret the information.

Unless otherwise noted, the source of employment and earnings data presented in the *Handbook* is the Pennsylvania Department of Labor & Industry, Center for Workforce Information & Analysis. Nearly all *Handbook* articles cite employment and earnings data from the Occupational Employment Statistics (OES) survey. Some articles include data from outside sources. OES data may be used to compare earnings among occupations; however, outside data may not be used in this manner because characteristics of these data vary widely.

The following are descriptions of the subheadings that appear under each of the occupations included in this handbook:

## Significant Points

This section highlights key occupational characteristics.

## Nature of the Work

This section describes what types of activities are involved in a particular occupation. Individual job duties may vary by industry or employer. For instance, workers in larger firms tend to be more specialized, whereas those in smaller firms often have a wider variety of duties. Most occupations have several levels of skills and responsibilities through which workers may progress. Beginners may start as trainees performing routine tasks under close supervision. Experienced workers usually undertake more difficult tasks and are expected to perform with less supervision.

## Working Conditions

It is important to research the working conditions of an occupation. This section identifies the typical hours worked, the workplace environment, physical activities and susceptibility to injury, special equipment, and the extent of travel required. In many occupations, people work regular business hours - 40 hours a week, Monday through Friday - but in many others, they do not. For example, waiters and waitresses often work evenings and weekends.

## Employment

This section reports the number of jobs the occupation provided in 2004 (nationwide and Pennsylvania) and the key industries where these jobs are found. When significant, the geographic distribution of jobs and the proportion of part-time (less than 35 hours a week) and self-employed workers in the occupation are mentioned.

## Job Outlook

The long-term job outlook is a factor to consider when deciding on an occupation. This section shows anticipated growth or decline for an occupation in Pennsylvania by comparing actual 2004 employment figures with projected employment for 2014. In addition, this section describes the factors that will result in growth or decline in the number of jobs. In some cases, the *Handbook* mentions that an occupation is likely to provide numerous job openings or relatively few openings. Occupations that are large and have high turnover, such as cashiers and retail sales positions, generally provide the most job openings. Susceptibility to layoffs due to imports, slowdowns

in economic activity, technological advancements, or budget cuts are also addressed in this section. For example, employment of construction craft workers is sensitive to slowdowns in construction activity, while employment of government workers is sensitive to budget cuts.

## Earnings

This section discusses typical earnings and how workers are compensated—annual salaries, hourly wages, commissions, piece rates, tips, or bonuses. Within every occupation, earnings vary by experience, responsibility, performance, tenure, and geographic area. Earnings data are from the Occupational Employment Statistics annual survey of Pennsylvania employers. Average hourly earnings for entry-level and experienced-level workers are now available as well.

Benefits account for a significant portion of total compensation costs to employers. Benefits such as paid vacation, health insurance, and sick leave may not be mentioned because they are so widespread. Though not as common as traditional benefits, employers may offer flexible hours and profit sharing plans to attract and retain highly qualified workers. Less common benefits also include childcare, tuition for dependents, housing assistance, summers off, and free or discounted merchandise or services.

## Training, Other Qualifications and Advancement

Knowing what kinds of training or education are required for a job is an important part of career planning. This section describes the most significant sources of training, including the training preferred by employers, the typical length of training, and advancement possibilities. Job skills are sometimes acquired through high school, informal on-the-job training, formal training (including apprenticeships), the Armed Forces, home study, hobbies, or previous work experience. For example, sales experience is particularly important for many sales jobs, which may not require any education beyond high school. Many professional and technical jobs, on the other hand, require formal post-secondary education—vocational or technical training, or college, postgraduate, or professional education.

Also discussed here are the qualifications usually expected of job applicants, as well as opportunities for advancement or promotion. Some occupations require certification or licensing to enter the field, to advance, or to practice independently. Certification or licensing generally involves completing courses and passing examinations. Increasingly, many occupations have continuing education or skill improvement requirements to keep up with the changing economy or to improve advancement opportunities.

## Related Occupations

Occupations involving similar duties, skills, interests, education, and training are listed.

## Sources of Additional Information

No single publication can completely describe all aspects of an occupation. Thus, the *Handbook* lists mailing addresses for associations, government agencies, unions, and other organizations that can provide occupational information. In some cases, toll free phone numbers and Internet addresses also are listed. Links to non-BLS Internet sites are provided for your convenience and do not constitute an endorsement.

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(717) 787-6466 or toll-free at 1-877-493-3282.

**Arts, Architecture,  
Recreation and  
Communication Services**

## Arts, Architecture, Recreation and Communication Services Introduction

This portion of the handbook focuses on occupations in the arts, architecture, recreation and communication services career cluster. The cluster contains occupations in such fields as writing and editing, music, designing, sports and recreation.

Writers and editors are expected to see employment increases in Pennsylvania through 2014. The outlook for these jobs is expected to be competitive, with those holding a degree in liberal arts or a technical subject, such as engineering, having the most favorable employment prospects.

The number of designers is predicted to increase by about 10 percent in the coming years, primarily in the graphic art field. Education and creativity will be crucial for persons entering these fields, as competition will be keen.

Employment among broadcast and sound engineering technicians is anticipated to grow through 2014 as well. Growth among audio and video technicians is predicted to be especially robust as colleges and universities integrate multimedia into their classrooms.

Another bright prospect for employment in this cluster is recreation workers. Increased health awareness among the general population and a rising demand for recreational activities for older adults at senior centers has spurred growth in this occupation. Opportunities for full-time positions will better for persons with formal training or previous experience.

A detailed analysis of the above-mentioned occupations is contained in the following pages. Additional occupations covered in this section include actors, news analysts, reporters, announcers, architects and others.

## Arts, Architecture, Recreation and Communication Services Occupations

The occupations in green are either new to this edition or have had a name change since the last.

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### Introduction to Arts, Architecture, Recreation and Communication Services

Actors, Directors & Producers

Musicians, Singers & Related Workers

Announcers

**News Analysts, Reporters & Correspondents**

Architects

Photographers & Camera Operators

Archivists, Curators & Museum Technicians

Photographic Process Workers

**Broadcast & Sound Engineering Technicians**

Recreation Workers

Communications Equipment Operators

Sports & Physical Training Instructors & Coaches

Computer Operators

Visual Artists

Dancers & Choreographers

Writers & Editors

Designers



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## Actors, Directors & Producers

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SOC CODES: 27-2011 and 27-2012

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### Significant Points

- Although formal training is helpful, previous experience and raw talent are more important.
- Keen competition is expected for the limited number of job openings.

### Nature of the Work

- Actors, directors & producers express ideas and create images in theater, film, radio, television and a variety of other media.  
*Actors* entertain people through their interpretation of dramatic roles. Background performers, or “extras,” usually have small parts and no lines to deliver. Few actors ever achieve recognition as stars.  
*Directors* interpret scripts and use their knowledge to achieve the best possible performances. They also audition cast members and conduct rehearsals.  
*Producers* select scripts and arrange financing. They often decide the size, cost, and content of a production.
- Although often associated with Hollywood or Broadway, most of these workers are found in local theaters, television studios, comedy clubs and circuses.

### Working Conditions

- Performances take place in the evening and rehearsals occur during the day. As a result, most entertainers work very late hours.
- Because their work is usually part-time, many actors experience periods of unemployment. They may supplement their income by taking other jobs.
- Weekend travel may be required for actors, directors, and producers involved in road shows.
- Actors require physical stamina to handle the heat associated with stage lights and heavy costumes.
- Directors and producers may feel stress as they try to meet schedules and stay on budget.

### Employment

- Actors, directors & producers held about 156,700 jobs in 2004 in the United States and approximately 2,660 jobs in Pennsylvania.
- Over 24 percent worked for companies that broadcast radio and television programs. Another 16 percent worked for companies that produce live theater presentations. About 1 in 5 were self-employed.
- The following table includes the industries that employed the most actors, directors & producers in 2004 in Pennsylvania.

Industry	2004 Employment	Percent
Radio & Television Broadcasting	650	24.4%
Self-Employed	550	20.5%
Performing Arts Companies	440	16.4%
Motion Picture & Video Industries	310	11.7%

### Job Outlook

- Employment of actors, directors & producers in Pennsylvania is expected to grow from approximately 2,660 in 2004 to approximately 2,930 in 2014. These workers can expect about 27 openings due to growth and about 39 replacement openings for approximately 66 total annual openings.
- Rising entertainment demands in foreign and domestic markets should stimulate employment growth for actors and other production personnel.
- Keen competition is expected as the number of qualified applicants outpaces the number of job openings. Only the most talented individuals will find regular employment.
- Funding cuts could adversely affect future employment levels in this field.

### **Earnings**

- No Pennsylvania-specific wage information was available for actors. However, the average hourly wage nationwide for actors in 2005 was \$23.73.
- Average hourly earnings of producers & directors in Pennsylvania were \$24.95 in 2005. The entry-level wage in 2005 was \$11.44 while an experienced producer or director made \$31.71.
- Well-known actors often have salaries well above the minimums. This helps create the false image that all actors are highly paid. In reality, most have relatively low earnings because their employment is so erratic.
- Actors who are covered by union contracts are often entitled to sick leave, vacations, health benefits, and pension plans. Non-union actors usually do not enjoy such benefits.
- Producers seldom get a set fee. Instead, they receive a percentage of a show's earnings or ticket sales.

### **Training, Other Qualifications and Advancement**

Many people have the technical skills necessary to enter this industry but few receive the opportunity to display their talent. The best way to start is to use local opportunities and build on them. High school, college and local theater productions offer invaluable experience. Eventually, actors and directors work their way up to major productions. However, intense competition ensures that few succeed.

Aspiring actors need talent, creativity and stage presence. An ability to follow directions is also very important. Drama training is highly beneficial. Additional singing, dancing and modeling experience may be helpful. Ultimately, physical appearance may be the deciding factor in being selected for a particular role.

Professional actors often rely on agents to find work, negotiate contracts, and plan their careers. In return, agents earn a percentage of the actor's contract. A few actors rely on open auditions, which are listed in trade publications. However, many of these auditions are open only to union members and union membership requires previous experience.

Formal drama programs are available at many colleges and universities. Even experienced actors pursue formal training to improve their skills and learn new ones. In addition, many actors research their character's lifestyle and history. Some may learn a foreign language or develop an accent to make their character more realistic.

As their reputations grow, these entertainers may advance to larger productions or more prestigious theaters. A few move into acting-related jobs, such as teaching.

Although there are no specific training requirements for directors and producers, formal programs are available at many colleges and universities. Talent, experience and strong business skills are very important traits. Many successful directors and producers were previously actors, film editors and business managers.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of actors, directors & producers include playwrights, scriptwriters, stage managers, costume designers, makeup artists, hair stylists, lighting designers, set designers, managing directors, company managers, booking managers, publicists and agents.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- Theatre Communications Group, Inc., 355 Lexington Ave., New York, NY 10017. Internet: <http://www.tcg.org>
- National Association of Schools of Theater, 11250 Roger Bacon Dr., Suite 21, Reston, VA 20190. Internet: <http://nast.arts-accredit.org>
- Screen Actors Guild, 5757 Wilshire Blvd., Los Angeles, CA 90036-3600. Internet: <http://www.sag.org>
- The Association of Independent Video and Filmmakers, 304 Hudson St., 6th Floor, New York, NY 10013. Internet: <http://www.aivf.org>
- American Federation of Television and Radio Artists—Screen Actors Guild, 4340 East-West Hwy, Suite 204, Bethesda, MD 20814-4411. Internet: <http://www.aftra.org/aftra/aftra.htm>

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## Announcers

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SOC CODE: 27-3011 and 27-3012

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### Significant Points

- Entry into this occupation is highly competitive.
- Opportunities will be best for those with internship experience or specialized knowledge.
- Over 95 percent worked in radio and television.

### Nature of the Work

- Announcers in radio and television perform a variety of tasks, both on the air and off. They may host programs, interview guests, or moderate discussions. Some provide commentary during special events.  
*Radio announcers*, or *disc jockeys*, determine music selections and provide informational updates on news and traffic. They may also take listener requests.  
*Show hosts* specialize in a certain area of interest such as politics, sports or health. They assist with program preparation and discuss issues with their audience.
- Other announcers use a public address system to provide information. Some play music at clubs, dances, restaurants, or weddings.
- In smaller stations, announcers may have additional off-air duties, which include operating the control board, monitoring the transmitter, and selling commercial time to advertisers.
- Well-known announcers often make promotional appearances and participate in community events.

### Working Conditions

- Because many radio and television stations are in operation 24 hours per day, announcers should expect to work long, irregular hours.
- Studios are usually well-lit, air-conditioned and soundproofed.
- Working within tight schedule constraints can be physically and mentally stressful.

### Employment

- Announcers held about 69,100 jobs in 2004 in the United States and approximately 2,200 jobs in Pennsylvania.
- Three-fourths worked for companies that broadcast radio and television programs. Another 18 percent were self-employed.

### Job Outlook

- Employment of announcers in Pennsylvania is expected to decrease from approximately 2,200 in 2004 to approximately 2,180 in 2014. About 55 annual openings will result from replacement needs. Although no net employment growth is expected statewide, growth openings may occur in some areas.
- Station consolidation, new technology, and the growth of alternative media sources will contribute to the declining employment of announcers.
- Keen competition is expected because the number of applicants outpaces the number of openings.
- Opportunities will be best for those with internship experience or specialized knowledge in an area.
- Employment in this occupation is not significantly affected by economic condition. During a recession, stations are more likely to cut “behind-the-scenes” workers rather than announcers.

### Earnings

- The average annual earnings of radio & television announcers in Pennsylvania were \$28,250 in 2005. The entry-level wage in 2005 was \$12,470 while an experienced radio or TV announcer made \$36,140.
- The average annual earnings of public address announcers in Pennsylvania were \$25,690 in 2005. The entry-level wage in 2005 was \$12,360 while an experienced public address announcer made \$32,350.

### Training, Other Qualifications and Advancement

Entry into this occupation is highly competitive. Formal broadcasting training from a college or technical school is advantageous. Before applying to any school, potential announcers should contact local radio and television stations to verify the school’s reputation for producing suitably trained graduates.

When hiring new announcers, station officials pay particular attention to the applicant’s taped audition. A candidate’s delivery, appearance, and style are evaluated. Those selected by television stations may start out as

production assistants, researchers, reporters, or even camera operators. Likewise, newly hired radio announcers are assigned to taping interviews and operating equipment. If an aptitude for “on-air” work is shown, newly hired workers may be given a chance to move into announcing. However, these opportunities are remote.

Valuable experience can be obtained at campus radio or television facilities. Formal internships, either paid or unpaid, provide students with hands-on experience and the chance to establish industry contacts. Unpaid interns are usually given college credit and are allowed to observe and assist station employees. Paid internships are less common but more valuable. These interns do the same work that is ordinarily done by regular employees and may even get the chance to go on the air.

Aspiring announcers need a pleasant voice, good timing, and excellent pronunciation. They should be able to ad-lib and work under pressure. Because programming is created and edited by computers, announcers must be computer-literate. Television announcers also need a neat, pleasant appearance. The most successful announcers combine a pleasing personality with an appealing style. Knowledge of a wide variety of subjects can further improve one’s chances for success.

Qualified individuals may transfer from a station in a small community to a better paying job in a large city. They may be assigned to host a regular program as a disc jockey, sportscaster, or other specialist. However, competition for advancement is very competitive. Employers usually promote announcers who have a college degree and several years of successful experience.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of announcers include interpreters, sales workers, public relations specialists, news reporters, correspondents, teachers, actors, directors, producers, dancers, and musicians.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- National Association of Broadcasters, 1771 N St. NW, Washington, DC 20036. Internet: <http://www.nab.org>

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## Architects

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SOC CODE: 17-1011

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### Significant Points

- Individuals must be licensed before they can call themselves architects.
- Construction levels greatly affect the employment growth of architects.
- About 1 in 6 were self-employed.

### Nature of the Work

- *Architects* are involved in all phases of designing buildings and other structures. Some specialize in one phase of work or one type of building. Others focus on planning, pre-design services, or construction management.
- Initial drawings and a concept report are presented to the client for review. Once an idea is accepted, architects develop final plans that include details for the construction. These plans must adhere to building codes, zoning laws, fire regulations, and other ordinances.
- For most projects, architects must work with a team of engineers, urban planners, interior designers and landscape architects.

### Working Conditions

- Architects usually work more than 40 hours per week. Evening and weekend work may be required to meet certain project deadlines.
- Most work is done in a comfortable, office environment. Frequent visits are made to the construction site to review the progress.
- Stress levels may increase as project deadlines approach.

### Employment

- Architects held about 128,800 jobs in 2004 in the United States and approximately 3,910 jobs in Pennsylvania.
- About 69 percent were employed with architectural firms. Another 17 percent were self-employed.

### Job Outlook

- Employment of architects in Pennsylvania is expected to grow from approximately 3,910 in 2004 to approximately 4,000 in 2014. Architects can expect about 9 openings due to growth and about 45 replacement openings for approximately 54 total annual openings.
- As the demand for non-residential construction continues, architects can expect many job opportunities. In addition, architects will always be needed to remodel and repair existing buildings.
- Keen competition will exist for architects who specialize in office and retail buildings.

### Earnings

Average annual earnings of architects were \$68,770 in 2005. The entry-level wage in 2005 was \$44,980 while an experienced architect made \$80,670.

### Training, Other Qualifications and Advancement

All individuals must be licensed before they may call themselves architects or provide architectural services. Licensing requirements include obtaining a professional degree in architecture, completing a period of practical training, and passing all sections of the Architect Registration Examination (ARE).

Professional degrees in architecture are obtained from an accredited program. Typical programs last five years and include courses in architectural history, building design, professional practice, math, physical sciences and liberal arts. In the design studio, students get time to practice the skills and concepts that were learned in the classroom. Studio time is normally spent creating an architectural project from beginning to end.

New graduates compose documents, prepare drawings and perform research. Over a three-year period, these "intern-architects" are exposed to diversified training under the supervision of a licensed architect. Once they have completed their training period, intern-architects are eligible to sit for the ARE. Candidates who pass the ARE and meet all of the state board standards are awarded an architect's license. Licensed architects are required to take legal responsibility for all work performed. Continuing education is required to maintain a license. Individuals who are licensed in one state must meet the licensing requirements of another state before practicing there.

Although artistic ability is helpful to aspiring architects, it is not essential. More important is the ability to conceptualize and understand spatial relationships. Creativity and strong communication skills are very important. Architects should be able to work well independently or as part of a team. A working knowledge of computers and computer-aided design and drafting (CADD) may provide a distinct advantage.

Experienced architects take on more duties and eventually manage entire projects. Some advance to supervisory or managerial positions. Others become partners in a firm or set up their own practice.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of architects include landscape architects, building contractors, civil engineers, urban planners, interior designers, industrial designers and graphic designers.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- Careers in Architecture Program, The American Institute of Architects, 1735 New York Ave. NW, Washington, DC 20006. Internet: <http://www.aia.org>
- Intern Development Program, National Council of Architectural Registration Boards, Suite 1100K, 1801 K Street NW, Washington, D.C. 20006-1310. Internet: <http://www.ncarb.org>

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## Archivists, Curators & Museum Technicians

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SOC CODE: 25-4011, 25-4012 and 25-4013

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### Significant Points

- Competition will be keen for the limited number of job openings.
- Substantial work experience is required to obtain a permanent position.
- Minimum requirements include advanced education and related work experience.

### Nature of the Work

- Archivists, curators & museum technicians oversee the arrangement, cataloguing, exhibition, and maintenance of collections.
  - Archivists* determine what portion of an organization's records should be made part of the permanent historical holdings. They also decide what to put on exhibit.
  - Curators* oversee collections in museums, zoos, aquariums, botanical gardens, nature centers, and historic sites. They also plan and prepare exhibits.
  - Conservators* manage, preserve, treat, and document specimens.
  - Museum directors* formulate policies, plan budgets, and raise funds for their museums.
  - Museum technicians* perform basic preparatory and maintenance tasks on museum items.
- In addition to their basic duties, most archivists and curators also coordinate outreach programs. Some perform research on topics or items that are relevant to their collections.

### Working Conditions

- Some archivists, curators & museum technicians spend their time working with the public, while others work individually to perform research or process records.
- Climbing, stretching and lifting are often required to restore or install exhibits. Workers in zoos, botanical gardens and outdoor museums also spend a great deal of time walking.
- In large institutions, curators may travel extensively to evaluate potential additions to the collection or conduct research in their area of expertise. Travel is rare in smaller companies.

### Employment

- Archivists, curators & museum technicians held about 26,700 jobs in 2004 in the United States and approximately 740 jobs in Pennsylvania.
- Over 50 percent worked in museums and art galleries. Others worked for educational institutions, government agencies, and civic organizations. About 1 in 13 were self-employed.

### Job Outlook

- Employment of archivists, curators & museum technicians in Pennsylvania is expected to grow from approximately 740 in 2004 to 870 in 2014. These workers can expect about 13 openings due to growth and about 17 replacement openings for approximately 30 total annual openings.
- Employment growth will continue as companies emphasize the establishment of information archives. An increased public interest in science, art, and history will also contribute to growth.
- Competition will be keen for the limited number of job openings. Opportunities will be best for graduates who have highly specialized training and extensive computer skills.
- Substantial work experience will be required in order to obtain a permanent position. Applicants may have to work part-time, as an intern, or even as a volunteer.

### Earnings

- In Pennsylvania, archivists, curators & museum technicians earned \$34,400 to \$46,500 annually in 2005. Entry-level technicians earned between \$18,200 and \$27,100, while experienced workers were paid anywhere from \$40,600 to \$56,300.
- The following table includes the average annual, entry level and experienced level wages in 2005 for archivists, curators & museum technicians in Pennsylvania.

Occupational Title	Average Annual Wage	Entry Level Wage	Experienced Level Wage
Archivists	\$39,740	\$18,260	\$50,480
Curators	\$46,490	\$27,040	\$56,220
Museum Technicians	\$34,410	\$21,920	\$40,660

### **Training, Other Qualifications and Advancement**

Minimum requirements for archivist, curator & museum technician positions include advanced education and related work experience. To gain practical experience, many archivists and curators work while completing their formal education.

Entry-level archivists must have an appropriate undergraduate or graduate degree. Many obtain a dual master's degree in history and library science. Beyond formal education, aspiring archivists need research and analytical ability. To ensure proper record care, a background in preservation management is beneficial. Organization, communication, and computer skills are all very important. In addition, voluntary certification is available for experienced applicants who pass the examination. Because many archives are small, opportunities for advancement are limited. In order to be promoted, archivists may have to transfer to larger facilities. For some positions, such as archive director, a doctorate degree may be needed.

A master's degree is often required for curator positions, although a bachelor's degree may be sufficient in smaller museums. However, many employers prefer to hire those with a doctoral degree. Earning a dual degree may give a candidate a distinct advantage. Aspiring curators must be flexible in order to deal with a wide variety of duties. Manual dexterity may be needed to build exhibits and restore objects. Experienced curators may advance through several levels of responsibility. In larger museums, they may eventually be promoted to museum director positions. Individual research and publications can be important factors for advancement.

Museum and archive technicians should have an appropriate bachelor's degree or relevant work experience. These positions often serve as stepping-stones for aspiring archivists and curators. Except in smaller museums, a master's degree is needed to advance beyond the technician position.

Employers look for conservators that have a master's degree and substantial experience. Because there are very few graduate programs in museum conservation, the competition for admission is keen. Qualified students have a background in chemistry, archaeology, and art history. Knowledge of a second language can be very beneficial. Undergraduate apprenticeships and internships can also improve one's admission prospects.

Continuing education is necessary to keep abreast of new developments in the field. Experienced workers often attend association-sponsored meetings, conferences, and workshops. Some larger organizations offer in-house training programs.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of archivists, curators & museum technicians include anthropologists, arborists, archaeologists, botanists, ethnologists, genealogists, historians, horticulturists, information specialists, librarians, paintings restorers, records managers and zoologists.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- Society of American Archivists, 527 South Wells St., 5<sup>th</sup> floor, Chicago, IL 60607-3922. Internet: <http://www.archivists.org>
- American Association of Museums, 1575 Eye St. NW, Suite 400, Washington, DC 20005. Internet: <http://www.aam-us.org>
- American Institute for Conservation of Historic and Artistic Works, 1717 K St. NW, Suite 200, Washington, DC 20006. Internet: <http://aic.stanford.edu>



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## Broadcast & Sound Engineering Technicians

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SOC CODES: 27-4011, 27-4012, 27-4013 and 27-4014

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### Significant Points

- Most learn through on-the-job training but technical schools and colleges provide the best preparation.
- Keen competition is expected in large metropolitan areas.
- Opportunities will be particularly strong on college campuses.

### Nature of the Work

- Broadcast & sound engineering technicians install, test, operate and repair the electronic equipment that is used to record and transmit radio programs, television programs, cable programs and motion pictures.

*Audio and video equipment technicians* set up and operate video and audio equipment.

*Transmitter operators* monitor and log outgoing signals.

*Maintenance technicians* set-up, adjust and repair electronic broadcasting equipment.

*Audio control engineers* regulate the volume and sound quality of television broadcasts.

*Video control engineers* control the fidelity, brightness, and contrast of television broadcasts.

*Recording engineers* operate and maintain video and sound recording equipment.

*Sound mixers* produce the sound track of a movie, television, or radio program.

*Field technicians* are responsible for setting-up and operating portable broadcasting equipment.

*Chief engineers, transmission engineers & broadcast field supervisors* supervise the technicians who operate and maintain broadcasting equipment.

- In smaller stations, broadcast & sound engineering technicians perform a variety of duties. Those employed with larger companies are usually more specialized.

### Working Conditions

- Most broadcast & sound engineering technicians work a 40-hour week. Evening, weekend and holiday work is common. Occasional overtime is needed to meet broadcasting deadlines.
- Work is usually performed in pleasant, indoor studios. However, some technicians broadcast programs from outdoor locations.
- When performing maintenance, broadcast & sound engineering technicians often climb poles or antenna towers. Heavy lifting may be required to set-up equipment.

### Employment

- Broadcast & sound engineering technicians held about 95,300 jobs in 2004 in the United States and around 2,970 jobs in Pennsylvania.
- About 30 percent worked for companies that broadcast radio and television programs. Colleges & universities employed another 11 percent. Others worked in the motion picture and cable television industries.
- The following table includes the industries that employed the most broadcast & sound engineering technicians in 2004 in Pennsylvania.

Industry	2004 Employment	Percent
Radio & Television Broadcasting	890	30.0%
Colleges & Universities	320	10.9%
Accounting & Bookkeeping Services	280	9.4%
Cable & Other Program Distribution	220	7.5%
Motion Picture & Video Industries	180	6.0%

### Job Outlook

- Employment of broadcast & sound engineering technicians in Pennsylvania is expected to grow from 2,970 in 2004 to 3,330 in 2014. These technicians can expect about 36 openings due to growth and about 73 replacement openings for approximately 109 total annual openings.

- Strong competition is expected in large metropolitan areas because the number of qualified applicants outpaces the number of job openings.
- Prospects will be best for highly trained individuals in smaller markets.
- Demand for audio and video equipment technicians will be particularly strong on college campuses, where more “electronic classrooms” are being built and multimedia instruction becomes even more popular.

### **Earnings**

- In Pennsylvania, broadcast & sound engineering technicians earned \$32,800 to \$36,700 annually in 2005. Entry-level technicians earned between \$16,300 and \$21,500, while experienced workers were paid anywhere from \$40,200 to \$44,300.
- The following table includes the average annual, entry level and experienced level wages in 2005 for broadcast & sound engineering technicians in Pennsylvania.

Occupational Title	Average Annual Wage	Entry Level Wage	Experienced Level Wage
Audio & Video Equipment Technicians	\$32,870	\$18,110	\$40,240
Broadcast Technicians	\$33,260	\$16,370	\$41,700
Radio Operators	N/A	N/A	N/A
Sound Engineering Technicians	\$36,660	\$21,500	\$44,240

- No Pennsylvania-specific wage information was available for radio operators. However, the national average annual earnings of radio operators were \$37,880 in 2005.

### **Training, Other Qualifications, and Advancement**

Most broadcast & sound engineering technicians learn their skills through on-the-job training. However, the best way to prepare for a career in this field is to obtain formal training in broadcast technology, engineering or electronics. Formal programs are offered at many community colleges, technical schools and four-year colleges. In addition to education, aspiring broadcast & sound technicians should have manual dexterity. An aptitude for working with electrical, electronic and mechanical equipment is also essential. To keep abreast of developments in the field, experienced broadcast & sound technicians attend courses and seminars, often at their employer’s expense.

Voluntary certification is available through the Society of Broadcast Engineers. To obtain certification, experienced technicians must pass the required examination. Successful applicants are certified as Radio Operators or Television Operators.

Experienced technicians can advance to supervisor or chief engineer positions. At most large television stations, a college degree in engineering is required to become a chief engineer.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of broadcast & sound technicians include engineering technicians, science technicians, health technologists, health technicians, and electronic equipment installers and repairers.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- National Association of Broadcasters, 1771 N St. NW, Washington, DC 20036. Internet: <http://www.nab.org>
- The Society of Broadcast Engineers, 9247 N. Meridian St., Suite 305, Indianapolis, IN 46260. Internet: <http://www.sbe.org>
- Society of Motion Picture and Television Engineers (SMPTE), 595 W. Hartsdale Ave., White Plains, NY 10607. Internet: <http://www.smpte.org>

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## Communications Equipment Operators

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SOC CODES: 43-2011, 43-2021 and 43-2099

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### Significant Points

- Workers receive on-the-job training.
- Advancing technology and industry consolidations will cause employment to decline.
- One-quarter were employed with health care organizations.

### Nature of the Work

- Communications equipment operators assist customers in making telephone calls. Although most calls are connected automatically, callers sometimes require the assistance of an operator.
  - *Central office operators* help customers complete local and long distance calls.
  - *Directory assistance operators* provide information such as phone numbers or area codes.
  - *Switchboard operators* operate private branch exchange (PBX) switchboards to relay incoming, outgoing, and interoffice calls.
- When natural disasters occur, central office operators provide callers with emergency phone contacts.
- They may also operate telegraphic typewriters, telegraph keys, facsimile machines and related equipment to transmit and receive signals and messages.

### Working Conditions

- Switchboard operators generally work regular business hours over a five-day workweek. Work schedules may include evenings, holidays, and weekends for those employed by hotels and hospitals.
- Central office and directory assistance operators work a variety of shifts. Entry-level workers often have the less desirable schedules. Overtime may be needed during emergencies.
- Because of the irregular nature of telephone operator schedules, many employers seek part-time workers for those shifts that are difficult to fill.
- Workstations are designed to reduce the incidence of eyestrain, back discomfort, and injury.
- The work of operators is repetitive and hectic during peak calling periods. Supervisors often monitor operator performance. The rapid pace and frequent monitoring may cause stress.

### Employment

- Communications equipment operators held about 256,200 jobs in 2004 in the United States and approximately 12,430 jobs in Pennsylvania.
- More than 25 percent worked in the health care sector. Another 16 percent worked for telephone companies and other information and communication companies.
- The following table includes the industry groups that employed the most communications equipment operators in 2004 in Pennsylvania.

Industry Group	2004 Employment	Percent
Health Care	3,160	25.4%
Information	1,990	16.0%
Administrative Support	1,680	13.5%
Professional Services	1,020	8.2%
Finance & Insurance	720	5.8%

### Job Outlook

- Employment of communications equipment operators in Pennsylvania is expected to decrease from approximately 12,430 in 2004 to approximately 11,530 in 2014. About 316 annual openings will result from replacement needs. Although no net employment growth is expected statewide, growth openings may occur in some areas.

- Decline in the demand for telephone operators will be sharpest among directory assistance operators. Central office and switchboard operators will see small decreases. However, many companies will continue to employ operators so those callers having problems can access a “live” employee if desired.
- Electronic communications, such as the Internet and e-mail, and consolidations among telephone companies will reduce the need for communications equipment operators. Operators will be employed at fewer locations and will serve larger customer populations.

### **Earnings**

- In Pennsylvania, communications equipment operators earned \$10.90 to \$16.70 hourly in 2005. Entry-level operators earned between \$7.90 and \$13.40, while experienced communications equipment operators were paid anywhere from \$12.40 to \$18.40.
- The following table includes the average annual, entry level and experienced level wages in 2005 for communications equipment operators in Pennsylvania.

Occupational Title	Average Hourly Wage	Entry Level Wage	Experienced Level Wage
Switchboard Operators	\$10.91	\$7.90	\$12.41
Telephone Operators	\$14.44	\$9.73	\$16.79
Communications Equipment Operators, Other	\$16.68	\$13.32	\$18.37

### **Training, Other Qualifications and Advancement**

Communications equipment operators receive their training through classroom and on-the-job instruction, which can last several weeks. Operators may be paired with experienced personnel who provide hands-on instruction and monitor the time and quality of trainees’ responses to customer requests. Supervisors continue to closely monitor new employees after their initial training session is complete.

Employers generally require a high school diploma for operator positions. Applicants should have strong reading, spelling, and numerical skills. Operators must have clear speech, good hearing, and a courteous manner. Computer literacy and typing skills are also important traits. Familiarity with a foreign language may be helpful.

After experience is gained on the job, communications equipment operators may enter clerical occupations, such as customer service agents, dispatchers, and receptionists. Operators with a more technical background and an interest in telecommunications may advance into positions installing and repairing equipment. Promotions to supervisory positions are possible.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of communication equipment operators include dispatchers; hotel, motel and resort desk clerks; reservation and transportation ticket agents; information clerks; receptionists; and travel clerks.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- Communications Workers of America, 501 3rd St. NW, Washington, DC 20001-2797. Internet: <http://www.cwa-union.org>
- United States Telecom Association, 1401 H St. NW, Suite 600, Washington, DC 20005-2164. Internet: <http://www.usta.org>
- International Brotherhood of Electrical Workers, Telecommunications Department, 1125 15th. St. NW, Room 807, Washington, DC 20005. Internet: <http://www.ibew.org/IBEW/departments/telecommunications.htm>

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## Computer Operators

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SOC CODE: 43-9011

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### Significant Points

- Due to advances in technology, employment is expected to decline sharply.
- Opportunities should be best for those familiar with a variety of up-to-date operating systems.
- Formal training and previous work experience are essential to obtaining a job.

### Nature of the Work

- **Computer operators** oversee the operation of computer hardware systems. They anticipate problems and take preventive action, as well as solve problems that occur during operations.
- The duties of computer operators vary with the size of the installation, the type of equipment used, and the policies of the employer. Computer operators monitor the control console, respond to computer messages, and maintain logbooks and operating records. They may also load equipment with tapes, disks, and paper.
- The trend toward networking computers has forced a growing number of computer operators to work on personal computers (PCs) and minicomputers. The tasks performed are very similar to those performed on large computers.
- Sophisticated software and robotics enable a computer to perform many routine tasks formerly done by computer operators. Consequently, the responsibilities of many computer operators are shifting to areas such as network operations, user support, and database maintenance.

### Working Conditions

- Evening and weekend work may be required as many organizations use their computers 24 hours a day, 7 days a week. Shift assignments usually are made based on seniority. Increased automation will lessen the need for shift work as computers take over operations during less desirable working hours.
- Computer operators usually work in well-lit, well-ventilated, comfortable rooms.
- Operators are susceptible to eyestrain, back discomfort, and hand and wrist problems.

### Employment

- Computer operators held about 149,300 jobs in 2004 in the United States and about 7,440 jobs in Pennsylvania.
- These workers are spread throughout almost all industries, predominantly in the service-providing sector. They may work for hospitals, insurance agencies, banks or data processing firms.
- The following table includes the industry groups that employed the most computer operators in 2004 in Pennsylvania.

Industry Group	2004 Employment	Percent
Services	2,890	38.8%
Wholesale & Retail Trade	1,330	17.8%
Finance & Insurance	910	12.2%
Information	640	8.6%
Manufacturing	500	6.7%

### Job Outlook

- Employment of computer operators in Pennsylvania is expected to decrease from approximately 7,440 in 2004 to approximately 5,830 in 2014. About 158 annual openings will result from replacement needs. Although no net employment growth is expected statewide, growth openings may occur in some areas.
- Opportunities will be best for computer operators who are familiar with a variety of operating systems and who keep up to date with the latest technology.
- Advances in technology will require fewer operators to monitor a greater number of operations at the same time and be capable of solving a broader range of problems that may arise. Displaced computer operators may be reassigned to support staffs.

- Computer and data processing firms will employ more computer operators as more companies contract out their data processing.

### **Earnings**

Average hourly earnings of computer operators were \$15.97 in 2005. The entry-level rate in 2005 was \$10.37 while an experienced computer operator made \$18.76.

### **Training, Other Qualifications and Advancement**

Computer operators usually receive on-the-job training with their employer's equipment. The length of this training varies with the job and the experience of the worker. Formal training, through a community college, technical school or the Armed Forces, is recommended. As computer technology advances, more employers will require formal training and previous work experience.

Because technology changes so rapidly, computer operators must be adaptable and willing to learn. Strong communication skills are required in order to communicate well with programmers, users, and other computer operators. In addition, they must be able to work independently.

A few computer operators advance to supervisor positions. Others may advance to jobs in areas such as network operations, network support, or programming. A move into these types of jobs is becoming more difficult as employers require a bachelor's degree for these jobs.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of computer operators include computer analysts, computer programmers, computer service technicians, typesetters, compositors, data entry keyers, secretaries, typists and word processors.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- Association of Computer Operations Management (AFCOM), 722 E. Chapman Ave., Orange, CA 92860  
Internet: <http://www.afcom.com>

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## Dancers & Choreographers

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SOC CODES: 27-2031 and 27-2032

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### Significant Points

- Intensive training starts at an early age.
- Keen competition is expected for the limited number of job openings.

### Nature of the Work

- **Dancers** use a variety of dance forms to express ideas and stories. They usually perform as part of a group, although a few top dancers perform solo. Many combine stage work with teaching or choreography.
- **Choreographers** create original dances and develop new interpretations of traditional dances. They also audition performers and conduct rehearsals.

### Working Conditions

- Performances take place in the evening and rehearsals occur during the day. As a result, most dancers work very late hours. Weekend travel may be required for dancers in road shows.
- Because their work is usually part-time, many dancers experience periods of unemployment. They may supplement their income by teaching or taking other jobs.
- Due to the physical demands of dancing, most dancers stop performing by their late thirties. However, many remain in the field as choreographers, dance teachers, or artistic directors.

### Employment

- Dancers & choreographers held about 38,200 jobs in 2004 in the United States and approximately 760 jobs in Pennsylvania.
- Over 54 percent worked in dance studios and instruction schools. Another 16 percent were employed with performing arts companies, including dinner theaters and dance companies. About 1 in 6 were self-employed.
- The following table includes the industries that employed the most dancers & choreographers in 2004 in Pennsylvania.

Industry	2004 Employment	Percent
Other Schools & Instruction	410	54.2%
Performing Arts Companies	120	15.9%
Self-Employed	110	14.7%
Spectator Sports	60	7.8%

### Job Outlook

- Employment of dancers & choreographers in Pennsylvania is expected to grow from approximately 760 in 2004 to approximately 930 in 2014. These workers can expect about 17 openings due to growth and about 46 replacement openings for approximately 63 total annual openings.
- The growing popularity of dance has increased the demand for dance teachers. However, national dance companies should continue to provide the most employment opportunities.
- Keen competition is expected as the number of qualified applicants outpaces the number of job openings. Only the most talented will find regular employment.
- Funding cuts could adversely affect employment levels.

### Earnings

- No Pennsylvania-specific information was available for dancers. However, the average hourly wage nationwide for dancers in 2005 was \$13.22.
- Average hourly earnings of choreographers in Pennsylvania were \$13.75 in 2005. The entry-level wage in 2005 was \$7.50 while an experienced choreographer made \$16.88.
- Dancers that are covered by union contracts are often entitled to sick leave, vacations, health benefits and pension plans. Non-union dancers usually do not enjoy such benefits.

### **Training, Other Qualifications and Advancement**

Training characteristics depend upon the type of dance. Ballet training for women usually begins at five to eight years of age. Men, on the other hand, start dancing between the ages of 10 and 15. Modern dancers also require many years of intensive training. Most dancers have their professional auditions by age 17 or 18. However, their training does not stop. Professional dancers spend many hours a day rehearsing and taking lessons.

Because of the strenuous and time-consuming training required, a dancer's academic instruction may be minimal. However, many colleges and universities offer degree programs in dance. These programs usually concentrate on modern dance but also offer courses in ballet, dance history and movement analysis. Although a college education is not needed to obtain employment as a professional dancer, it can help dancers enter another field of work upon retirement. In fact, many dance teachers are required to have a college degree. Previous experience may be sufficient for teachers at local recreational facilities.

Successful dancers are flexible, graceful and creative. Good health and physical stamina are essential. Patience and self-discipline are vital because quality performances require constant training. Because they seldom perform unaccompanied, dancers must be able to work as part of a team. Aspiring dancers must be prepared to face rejection and periods of unemployment.

Professional advancement usually means an established reputation, more frequent work, and increased earnings. Experienced dancers often become choreographers when they get older.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of dancers & choreographers include athletes, actors, dance critics, dance instructors and dance therapists.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- National Association of Schools of Dance, 11250 Roger Bacon Dr., Suite 21, Reston, VA 20190. Internet: <http://nasd.arts-accredit.org>
- Dance/USA, 1156 15th St. NW, Suite 820, Washington, DC 20005. Internet: <http://www.danceusa.org>



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## Designers

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SOC CODES: 27-1021, 27-1022, 27-1023, 27-1024, 27-1025, 27-1026, 27-1027 and 27-1029

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### Significant Points

- Despite occupational growth, keen competition is expected for most job openings.
- Creativity is crucial in all design occupations.
- Education requirements for designers vary from specialty to specialty.

### Nature of the Work

- Designers combine practical knowledge with artistic ability to create formal designs for the clothes we wear, the spaces we inhabit, and the merchandise we buy.
- Once the needs of the client are determined, sketches are prepared, by hand or with the aid of a computer design program to illustrate their vision.
- Individuals often specialize in a particular area of design. Examples include:

***Industrial designers*** develop manufactured products, such as cars, toys, and home appliances.

***Furniture designers*** design furniture for manufacture. They may create custom pieces or styles.

***Graphic designers*** plan, analyze, and create visual solutions to communications problems. Many use computer software to develop the layout and production of their designs.

***Interior designers*** plan the interiors of private homes, public buildings, and commercial or institutional establishments. Many interior designers specialize on a particular room, such as kitchens or baths.

***Set, lighting & costume designers*** create set, lighting and costume designs for movie, television and theater productions.

***Fashion designers*** design clothing and accessories. They may create original garments or adapt designs for the mass market.

***Textile designers*** design fabric for garments, upholstery, and rugs.

***Floral designers*** cut and arrange live, dried, or artificial flowers according to the customer's order.

***Merchandise displayers & window dressers*** plan and erect commercial displays.

### Working Conditions

- Most designers work regular hours except for occasional overtime to meet deadlines. Set, lighting, and costume designers, on the other hand, work long, irregular hours, and face pressure to make rapid changes.
- Designers frequently adjust their work hours to suit clients' schedules.
- Independent consultants are under pressure to please clients and to find new ones to maintain an income.

### Employment

- Designers held about 571,500 jobs in 2004 in the United States and approximately 15,700 jobs in Pennsylvania.
- Over 20 percent were self-employed. Another 12 percent worked in retail flower shops. Others worked for specialized design firms and advertising agencies.
- The following table includes the industries that employed the most designers in 2004 in Pennsylvania.

Industry	2004 Employment	Percent
Self-Employed	3,260	20.8%
Florists	1,810	11.5%
Specialized Design Services	1,290	8.2%
Advertising & Related Services	870	5.5%
Newspaper, Book & Directory Publishers	820	5.3%

### Job Outlook

- Employment of designers in Pennsylvania is expected to grow from approximately 15,700 in 2004 to approximately 17,130 in 2014. Designers can expect about 143 openings due to growth and about 211 replacement openings for approximately 354 total annual openings.

- Despite projected employment growth, designers can expect keen competition for available positions. Individuals with little formal education in design will find it difficult to maintain a career in design.
- Floral design should be the least competitive of all design fields due to low pay, limited opportunities for advancement, and high job turnover.

### **Earnings**

- In Pennsylvania, designers averaged \$21,400 to \$58,800 annually in 2005. Entry-level designers earned between \$14,900 and \$29,800, while experienced designers were paid anywhere from \$24,300 to \$73,200.
- The following table includes the average annual, entry level, and experienced level wages for different design specialties in Pennsylvania.

Occupational Title	Average Annual Wage	Entry Level Wage	Experienced Level Wage
Commercial & Industrial Designers	\$54,700	\$27,230	\$68,430
Fashion Designers	\$58,720	\$29,780	\$73,190
Floral Designers	\$21,460	\$15,600	\$24,390
Graphic Designers	\$37,800	\$23,380	\$45,010
Interior Designers	\$46,600	\$26,430	\$56,680
Merchandise Displayers & Window Trimmers	\$22,910	\$14,960	\$26,890
Set & Exhibit Designers	\$37,670	\$25,290	\$43,860
Designers, Other	\$40,880	\$25,990	\$48,320

### **Training, Other Qualifications and Advancement**

Creativity is crucial in all design occupations. Designers must have an eye for detail, a sense of proportion, and an appreciation for beauty. Sketching ability is also helpful, especially for fashion designers. A good portfolio, a collection of examples of a person's work, is often the deciding factor in getting a job.

Educational requirements for entry-level positions vary. Some occupations, such as industrial and interior designers, require a Bachelor of Fine Arts degree, which is granted at four-year colleges and universities. Interior design is the only field subject to government regulation. Other fields require some formal training, which is available at professional schools. Graduates of two-year programs normally qualify as design assistants.

Set, lighting & costume designers typically have a Master of Fine Arts (MFA) degree from an accredited university program, which further establishes one's design credentials. Membership in the United Scenic Artists, Local 829, is a nationally recognized standard of achievement for scenic designers.

In contrast, floral designers learn their skills on the job. Employers generally hire high school graduates with a flair for color and a desire to learn. Completion of formal training is an asset for those who wish to advance to chief floral designer. Vocational and technical schools offer programs that usually last less than a year.

Computer-aided design (CAD) and computer-aided industrial design (CAID) programs are increasingly used in design. Creativity, imagination, and persistence are also important traits. Designers must be able to communicate their ideas visually, verbally or in writing. They must be open to new ideas and quick to react to changing trends. People in this field need self-discipline to work independently and under pressure.

New designers usually receive on-the-job training. At least one to three years of training is necessary before they can advance to higher-level positions such as chief designer or design department head. Some designers become teachers in design schools, colleges or universities while others open their own firms.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of designers include architects, visual artists, landscape architects, engineers, photographers, interior decorators, Internet page designers and webmasters.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- National Association of Schools of Art and Design, 11250 Roger Bacon Dr., Suite 21, Reston, VA 20190.

Internet: <http://nasad.arts-accredit.org>

- Industrial Designers Society of America, 1142-E Walker Rd., Great Falls, VA 22066. Internet: <http://www.idsa.org>
- American Society for Interior Designers, 608 Massachusetts Ave. NE, Washington, DC 20002-6006. Internet: <http://www.asid.org>
- Council for Interior Design Accreditation, 146 Monroe Center NW, Suite 1318, Grand Rapids, MI 49503-2822. Internet: <http://www.accredit-id.org>
- The Society of American Florists, 1601 Duke St., Alexandria, VA 22306. Internet: <http://www.safnow.org>
- American Institute of Graphic Arts, 164 Fifth Ave., New York, NY 10010. Internet: <http://www.aiga.org>
- National Kitchen and Bath Association, 687 Willow Grove St., Hackettstown, NJ 07840. Internet: <http://www.nkba.org/student>

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## Musicians, Singers & Related Workers

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SOC CODES: 27-2041 and 27-2042

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### Significant Points

- Training begins at a very early age.
- Keen competition is expected for all job openings.

### Nature of the Work

- Musicians, singers & related workers use instrumental and vocal performances to provide entertainment to the public. They may perform individually or as part of a group.

**Musicians** specialize in a particular kind of music or performance. They may play a variety of instruments. **Singers** interpret music using their knowledge of voice production, melody, and harmony. They are classified according to their voice range or the type of music they perform.

**Composers** create original music. Many use computers to compose and edit music.

**Arrangers** transcribe and adapt musical compositions for orchestras, bands, choral groups, or individuals.

**Conductors** direct the rehearsals and performances of instrumental music groups. They also audition musicians and select the music that will be played.

**Choral directors** lead the performances of vocal groups. They audition singers and conduct rehearsals.

- Most entertainers play for live audiences. Others prepare music in a recording studio.
- Considerable time is spent practicing, either alone or with their musical group.

### Working Conditions

- Musicians and singers often perform at night and on weekends.
- Because their work is usually part-time, many musicians and singers experience periods of unemployment between engagements. They may supplement their income by giving lessons or taking other jobs.
- Although most performances occur indoors, some are held outside. Certain venues may be smoky, poorly lit, and not well ventilated.
- Frequent travel is required to perform in variety of settings.

### Employment

- Musicians, singers & related workers held about 248,800 jobs in 2004 in the United States and approximately 8,940 jobs in Pennsylvania.
- Over 56 percent were employed with religious organizations. Another 14 percent worked for performing arts companies that produce live theater presentations. About 1 in 4 were self-employed.
- The following table includes the industries that employed the most musicians, singers & related workers in 2004 in Pennsylvania.

Industry	2004 Employment	Percent
Religious Organizations	4,990	55.8%
Self-Employed	2,390	26.7%
Performing Arts Companies	1,220	13.7%

### Job Outlook

- Employment of musicians, singers & related workers in Pennsylvania is expected to grow from approximately 8,940 in 2004 to approximately 10,000 in 2014. These workers can expect about 106 openings due to growth and about 187 replacement openings for approximately 293 total annual openings.
- Employment growth will be strongest in religious organizations. The number of self-employed entertainers will also continue to increase.
- Keen competition is expected as the number of qualified applicants outpaces the number of job openings.
- Job prospects should be best for musicians that can play several different instruments and types of music.

### **Earnings**

- Average hourly earnings of music directors & composers in Pennsylvania were \$14.69 in 2005. The entry-level wage in 2005 was \$5.97 while an experienced music director or composer made \$19.06.
- No Pennsylvania-specific information was available for musicians & singers. However, the average hourly wage nationwide for musicians & singers in 2005 was \$25.16.

### **Training, Other Qualifications and Advancement**

Musicians, singers & related workers need extensive training in order to acquire the necessary skill, knowledge, and ability to interpret music. Entertainers often begin studying music at a very early age. Their skills are further enhanced through private study, college-level programs, or music conservatories. When applying to formal programs, aspiring musicians and singers may be required to audition. Valuable experience can be obtained through participation in a school band, community band, choir, or school musical.

Many colleges, universities and music conservatories grant music degrees. An advanced degree is often required to teach advanced courses at colleges and universities. On the other hand, a bachelor's degree in music education qualifies graduates for State certification as an elementary or secondary school music teacher.

In addition to musical talent, students who are considering a career in music need versatility, creativity and poise. Self-discipline is vital because quality performances require constant studying and practicing. Aspiring musicians and singers should be prepared to face rejection and periods of unemployment. Physical stamina may be needed to play concert and nightclub engagements.

Professional advancement usually means an established reputation and increased earnings. Successful musicians and singers often rely on agents to find engagements, negotiate contracts and develop their careers.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of musicians, singers & related workers include music therapists, music teachers, instrument repairers, instrument tuners, booking agents, concert managers, music publishers, disc jockeys, music critics, sound technicians, music librarians and announcers.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- National Association of Schools of Music, 11250 Roger Bacon Dr., Suite 21, Reston, VA 20190-5248. Internet: <http://nasm.arts-accredit.org>
- International Bluegrass Music Association, 1620 Frederica St., Owensboro, KY 42301. Internet: <http://www.ibma.org>
- The Juilliard School, 60 Lincoln Center Plaza, New York, NY, 10023-6588. Internet: <http://www.juilliard.edu>

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## News Analysts, Reporters & Correspondents

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SOC CODE: 27-3021 and 27-3022

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### Significant Points

- Employers prefer applicants with a bachelor's degree in journalism and previous experience.
- Competition will be keen for jobs in larger organizations.
- Rapid employment growth is expected in newer media areas, such as online newspapers and magazines.

### Nature of the Work

- News analysts & reporters prepare stories and make broadcasts that inform us about events that are occurring locally, nationally, and internationally.
  - News analysts* examine, interpret and broadcast news received from various sources. They are also known as newscasters or news anchors.
  - Weathercasters* report current and forecasted weather conditions.
  - Sportscasters* select, write, and deliver sports news.
  - Reporters* investigate news tips, observe events, and interview people.
- Large organizations usually assign reporters to specific categories or beats, such as crime or education.

### Working Conditions

- Because many organizations operate 24 hours a day, news analysts and reporters can expect to work long, irregular hours. Work schedules may be changed to meet deadlines and follow-up on late-breaking developments. Reporters spend additional time traveling to and from the scene of the event.
- Some news analysts and reporters work in comfortable offices. Others work in noisy rooms that are filled with computers and printers.
- News analysts and reporters are under great pressure to meet deadlines and prepare broadcasts. In addition, reporters may face danger when covering wars, fires, floods, and other similar events.

### Employment

- News analysts & reporters held about 63,900 jobs in 2004 in the United States and approximately 2,740 jobs in Pennsylvania.
- Almost 73 percent worked for newspaper or book publishers. Another 17 percent were employed with companies that broadcast radio and television programs.

### Job Outlook

- Employment of news analysts & reporters in Pennsylvania is expected to grow from approximately 2,740 in 2004 to approximately 2,800 in 2014. These workers can expect about 6 openings due to growth and about 67 replacement openings for approximately 73 total annual openings.
- Rapid employment growth is expected in newer media areas, such as online newspapers and magazines.
- Competition will be keen for jobs in larger organizations. Talented applicants who can handle highly scientific and technical subjects may have an advantage.
- Employment levels of news analysts and reporters are sensitive to economic conditions. During recessions, few new reporters are hired and some experienced individuals may lose their jobs.

### Earnings

- Average annual earnings of broadcast news analysts in Pennsylvania were \$45,380 in 2005. The entry-level wage in 2005 was \$19,460 while an experienced broadcast news analyst made \$58,340.
- Average annual earnings of news reporters & correspondents in Pennsylvania were \$30,540 in 2005. The entry-level wage in 2005 was \$16,930 while an experienced news reporter or correspondent made \$37,350.

### Training, Other Qualifications and Advancement

When hiring news analysts and reporters, employers prefer to hire applicants that have a bachelor's degree in journalism. They also look for previous experience working on school newspapers, broadcasting stations, community papers, or Armed Forces publications. In fact, larger organizations usually require three to five years of practical experience. Applicants who have completed a formal internship may have an advantage.

Bachelor's degree programs in journalism are available at many colleges and universities. Several community and junior colleges also offer courses in journalism. Credits earned in these courses may be transferable to a four-year journalism program.

Entry-level workers are usually hired by smaller organizations. They are often assigned to cover court proceedings, summarize speeches, and write obituaries. As news analysts and reporters gain experience, they are given more difficult assignments. They may even be assigned a specific beat or particular field.

Aspiring news analysts and reporters should be dedicated to providing accurate and impartial news. Poise, persistence, and resourcefulness are important traits. Physical stamina and emotional stability are needed to deal with pressing deadlines, irregular hours, and dangerous assignments. News analysts should be comfortable on camera. They need a pleasant voice and appearance. Knowledge of a foreign language may be beneficial for reporters. In addition, reporters need strong word-processing, computer graphics, and desktop publishing skills.

Advancement opportunities are better in larger organizations. Experienced individuals may become columnists, correspondents, writers, announcers, or public relation specialists. Others take positions as editors or program managers. A few become broadcasting or publications industry managers.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of news analysts & reporters include technical writers, advertising copywriters, public relations workers, educational writers, fiction writers, biographers, screenwriters, editors, announcers, interpreters, sales workers, and teachers.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- The Newspaper Guild, 501 Third Street NW, Suite 250, Washington, DC 20001. Internet: <http://www.newsguild.org>
- Radio-Television News Directors Association & Foundation, 1600 K St. NW, Suite 700, Washington, DC 20006-2838. Internet: <http://www.rtndf.org>
- National Association of Broadcasters, 1771 N St. NW, Washington, DC 20036. Internet: <http://www.nab.org>
- Dow Jones Newspaper Fund, Inc., P.O. Box 300, Princeton, NJ 08543-0300. Internet: <http://djnewspaperfund.dowjones.com/fund>

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## Photographers & Camera Operators

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SOC CODES: 27-4021 and 27-4031

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### Significant Points

- Keen competition is expected for the limited number of openings.
- Over 43 percent were self-employed.

### Nature of the Work

- Photographers & camera operators produce images that allow an event to be remembered long after it actually occurs. Most specialize in a specific type of photography.

*Portrait photographers* take pictures of individuals or groups.

*Commercial & industrial photographers* take pictures of various subjects, such as buildings, merchandise, and landscapes.

*News photographers*, also called photojournalists, photograph newsworthy people, places, and events.

*Studio camera operators* work in broadcast studios and usually film their subjects from a fixed position.

*News camera operators* follow newsworthy events as part of a reporting team.

*Television & movie studio camera operators* use cameras in any of several different camera mounts.

*Steadicam operators* use a harness to provide a steady picture as they move through the action.

- In addition to automatic and manual cameras, photographers & camera operators use an array of film, lenses and other equipment. Many also use digital cameras, which store the image electronically.
- Some photographers develop their own film while others send it to a laboratory for processing.

### Working Conditions

- A 40-hour work schedule is common for photographers & camera operators. News photographers and motion picture camera operators often work long, irregular hours.
- Some photographers and camera operators work in their own studios. Others travel to the client's location.
- Surroundings may be uncomfortable, or even dangerous. Hours can be spent carrying heavy equipment and waiting for an event to take place.
- Deadlines and other time constraints may cause stress and fatigue.
- Self-employed photographers & camera operators have flexible scheduling and greater autonomy. However, their income can be uncertain.

### Employment

- Photographers & camera operators held about 157,700 jobs in 2004 in the United States and approximately 5,560 jobs in Pennsylvania.
- Over 43 percent were self-employed. Another 25 percent worked in photography studios. Others were employed with companies that broadcast radio and television programs.
- The following table includes the industries that employed the most photographers & camera operators in 2004 in Pennsylvania.

Industry	2004 Employment	Percent
Self-Employed	2,420	43.4%
Other Professional & Technical Services	1,360	24.5%
Radio & Television Broadcasting	380	6.8%
Newspaper, Book & Directory Publishers	330	5.9%
Data Processing & Related Services	320	5.8%

### Job Outlook

- Employment of photographers & camera operators in Pennsylvania is expected to grow from approximately 5,560 in 2004 to approximately 6,310 in 2014. These workers can expect about 75 openings due to growth and about 114 replacement openings for approximately 189 total annual openings.



- Keen competition is expected for photographer & camera operator positions as the number of interested applicants outpaces the limited number of openings.
- Employers can pick and choose among the most qualified and the most experienced applicants.
- Opportunities will be best for those who are able to adapt to rapidly changing technologies.

### **Earnings**

- Average annual earnings of photographers in Pennsylvania were \$28,670 in 2005. The entry-level wage in 2005 was \$17,040 while an experienced photographer made \$34,480.
- Average annual earnings of TV, video & motion picture camera operators in Pennsylvania were \$41,080 in 2005. The entry-level wage in 2005 was \$21,160 while an experienced camera operator made \$51,030.

### **Training, Other Qualifications and Advancement**

When hiring photographers & camera operators, employers look for applicants who have artistic ability as well as a strong technical understanding. Formal education, such as a college degree in photography or journalism, may be required for entry-level positions.

Individuals who are interested in photography should subscribe to photographic magazines and join camera clubs. Summer or part-time work in a camera shop or photo studio is valuable. Before starting school, aspiring photographers should decide on an area of interest to specialize in. Programs in photography are offered at universities, community colleges, junior colleges, and vocational-technical schools. Graduates from these postsecondary programs are normally hired as assistants to experienced photographers. They learn how to mix chemicals, develop film, print photographs, and perform other basic tasks. After several years, they may be promoted to editor positions.

Camera operators also attend formal postsecondary programs at vocational schools, colleges, universities or photographic institutes. Others acquire their skills through on-the-job training. Regardless of their educational background, entry-level camera operators learn basic duties, such as setting-up equipment. As experience is gained, individuals advance into more demanding assignments. Experienced camera operators can become directors of photography for movie studios, advertising agencies or television programs.

Aspiring photographers & camera operators need good eyesight and hand-eye coordination. Patience, accuracy and originality are important traits. In addition, photographers and camera operators must be detail-oriented and have the ability to put people at ease in front of the camera. Photographers must be able to work independently or with others. Camera operators need strong communication skills and the physical ability to hold a camera for extended periods of time.

Some photographers & camera operators become teachers and provide instruction in their area of specialization. A few open their own business. These individuals must know how to submit bids, write contracts, hire models, obtain releases, price photographs, and keep financial records.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of photographers & camera operators include illustrators, designers, artists, painters, sculptors and photo editors.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- Professional Photographers of America, Inc., 229 Peachtree St., NE, Suite 2200, Atlanta, GA 30303. Internet: <http://www.ppa.com>
- Advertising Photographers of America, 145 S. Olive St., Orange, CA 92866. Internet: <http://www.apanational.org>
- National Press Photographers Association, Inc., 3200 Croasdaile Dr., Suite 306, Durham, NC 27705. Internet: <http://www.nppa.org>

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## Photographic Process Workers

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SOC CODES: 51-9131 and 51-9132

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### Significant Points

- Most workers receive on-the-job training.
- Employment opportunities will decrease as the cost of digital photography continues to decline.

### Nature of the Work

- Photographic process workers develop film, make prints, and perform related photographic tasks. They are generally classified into two groups: photographic processing machine operators and precision photographic process workers.
- Most photographic processing machine operators have very specialized duties. They operate a variety of equipment, including mounting presses and film developing machines.

*Film process technicians* operate machines that develop exposed photographic film or sensitized paper to produce negative or positive images.

*Color printer operators* control equipment that produces color prints from negatives.

*Paper process technicians* develop strips of exposed photographic paper.

*Takedown sorters* sort processed film.

*Automatic mounters* operate equipment that cuts and mounts slide film into individual transparencies.

- Precision photographic process workers perform more delicate tasks, such as retouching negatives and prints to emphasize or correct specific features. Although a computer is used to perform some tasks, many are still completed by hand.

*Digital imaging technicians* use specialized computer software to adjust conventional negatives. They can remove unwanted backgrounds or combine features from several photographs.

*Airbrush artists* restore damaged and faded photographs. They may color or shade drawings to create photographic likenesses using an airbrush

*Photographic retouchers* alter negatives, prints, or images to accentuate the subject

*Colorists* apply oil colors to portrait photographs to create a natural, lifelike appearance.

*Photographic spotters* remove imperfections on photographic prints and images.

### Working Conditions

- Most photographic processing employees work a 40-hour week, including weekend shifts. Overtime work may be required during peak seasons.
- Processing work is usually done in clean, appropriately lit areas that are also well ventilated.
- Precision process workers perform detailed tasks, which can contribute to eye fatigue.
- Rubber gloves and aprons are worn to protect against exposure to chemicals and fumes associated with film developing and printing.

### Employment

- Photographic process workers held about 86,300 jobs in 2004 in the United States and approximately 3,020 jobs in Pennsylvania.
- Over 24 percent worked in photofinishing laboratories. Another 22 percent were employed with drug stores.
- The following table includes the industries that employed the most photographic process workers in 2004 in Pennsylvania.

Industry	2004 Employment	Percent
Other Personal Services	740	24.4%
Health & Personal Care Stores	670	22.3%
Other General Merchandise Stores	390	13.0%
Department Stores	330	10.9%

### **Job Outlook**

- Employment of photographic process workers in Pennsylvania is expected to decrease from approximately 3,020 in 2004 to approximately 2,020 in 2014. About 75 annual openings will result from replacement needs. Although no net employment growth is expected statewide, growth openings may occur in some areas.
- Demand for photographic process workers will decrease as the cost of digital photography continues to decline. However, population growth and an increased popularity of amateur photography will contribute to the ongoing need for photographic process workers.
- Regardless of the technological advancements, certain precision tasks must be done by hand. In particular, portrait studios will continue to rely on colorists and airbrush artists.

### **Earnings**

- Average hourly earnings of photographic process workers in Pennsylvania were \$10.83 in 2005. The entry-level rate in 2005 was \$6.92 while an experienced photographic process worker made \$12.79.
- Average hourly earnings of photographic processing machine operators in Pennsylvania were \$8.99 in 2005. The entry-level rate in 2005 was \$6.61 while an experienced processing machine operator made \$10.17.

### **Training, Other Qualifications and Advancement**

When hiring entry-level photographic process workers, employers prefer experienced applicants that are high school graduates. Formal training is available through high schools, vocational-technical schools, trade schools, and colleges. However, most photographic process workers receive on-the-job training, which can last anywhere from a few hours to several months. Newly hired employees learn how to handle the machines and chemicals that are used to develop and print film.

Aspiring photographic process workers need manual dexterity and good hand-eye coordination. Accurate eyesight and color perception are also important. Individuals must be comfortable with computers and able to adapt to technological advances. Previous courses in mathematics, art, chemistry, and photography provide a strong knowledge background.

In order to maintain and update their skills, photographic process workers may attend periodic training seminars. Experienced workers may be promoted to supervisory or management positions.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of photographic process workers include chemical laboratory technicians, crime laboratory analysts, food testers, medical laboratory assistants, metallurgical technicians, quality control technicians, engravers, computer operators, peripheral equipment operators, and printing press operators.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- Photo Marketing Association International, 3000 Picture Place, Jackson, MI 49201. Internet: <http://www.pmai.org>

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## Recreation Workers

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SOC CODE: 39-9032

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### Significant Points

- Educational requirements range from a high school diploma to a master's degree.
- Job prospects will be best for those seeking temporary, seasonal jobs.
- More than one-third worked in the health care sector.

### Nature of the Work

- Recreation workers plan, organize, and direct leisure activities. They may work at local playgrounds, parks, community centers, health clubs, religious organizations, camps, theme parks, or other tourist attractions.
- Duties and responsibilities vary with different positions.

*Activity specialists* provide instruction in activities such as art, music, drama, swimming, or tennis.

*Camp counselors* instruct children and teenagers in outdoor-oriented forms of recreation.

*Recreation leaders* are responsible for the daily operations of a program.

*Recreation supervisors* plan, organize, and manage recreational activities. They oversee recreation leaders.

*Directors of recreation and parks* develop and manage comprehensive recreation programs. They often serve as technical advisors to recreation and park commissions.

### Working Conditions

- Most recreation workers put in about 40 hours per week. Entry-level workers should expect irregular schedules, including night and weekend work. Many jobs are part-time and seasonal.
- Work settings can vary from cruise ships to wooded parks. Regardless of the setting, most recreation workers spend their time outdoors. Directors and supervisors spend their time in office environments.
- Recreation workers do risk injury during physical activities.

### Employment

- Recreation workers held about 309,500 jobs in 2004 in the United States and around 10,430 jobs in Pennsylvania.
- Almost 35 percent were employed with health care companies, including nursing homes and senior centers. Others worked for local government agencies or civic, religious and other social organizations.
- The following table identifies the industry groups that employed the most recreation workers in 2004 in Pennsylvania.

Industry Group	2004 Employment	Percent
Health Care	3,650	34.9%
Other Services	2,630	25.2%
Local Government	1,750	16.8%
Arts & Entertainment	940	9.0%
Accommodation & Food Services	560	5.4%

### Job Outlook

- Employment of recreation workers in Pennsylvania is expected to grow from approximately 10,430 in 2004 to approximately 12,010 in 2014. Recreation workers can expect about 159 openings due to growth and about 239 replacement openings for approximately 398 total annual openings.
- Employment growth will be strongest in the social services and commercial recreation industries.
- Recreation workers looking for career positions can expect keen competition. Prospects will be better for those seeking temporary, seasonal jobs.
- Opportunities should be best for those with formal training and previous experience.

## **Earnings**

Average hourly earnings of recreation workers in Pennsylvania were \$10.29 in 2005. The entry-level rate for in 2005 was \$6.73 while an experienced recreation worker made \$12.06.

## **Training, Other Qualifications and Advancement**

Educational requirements for recreation workers can range from a high school diploma to a master's degree. Many summer jobs do not even require a high school diploma. For full-time positions, a college degree in recreation or leisure studies may be needed. Any liberal arts degree may be sufficient for private sector jobs. When filling administrative or supervisory positions, employers prefer applicants with a related master's degree. However, experienced workers with a bachelor's degree may be promoted.

Formal training programs are offered at several colleges and universities. Courses provide broad exposure to the history, theory, and practice of recreation management. Students may specialize in areas such as therapeutic recreation or camp management. Specialized training or experience in a particular field is an asset for many jobs.

Certification in the recreation field, which is required for some jobs, is offered through the National Recreation and Park Administration (NRPA). The NRPA awards the designation of Certified Leisure Professional (CLP) to applicants with a college degree in recreation. Those with less than four years of college may be designated as Certified Leisure Technicians (CLT). Other specialized certifications are also available. Regardless of the title, continuing education is required to remain certified.

Aspiring recreation workers should be outgoing and motivational. They must be creative, resourceful, and sensitive to the needs of others. In order to lead physical activities, workers must be in good health. Managerial skills are needed to advance to the supervisory or administrative level. Courses in management, business administration, and accounting can be beneficial.

## **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of recreation workers include recreational therapists, social workers, parole officers, human relations counselors, school counselors, clinical psychologists, counseling psychologists, and teachers.

## **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- National Recreation and Park Association, 22377 Belmont Ridge Road, Ashburn, VA 20148-4501. Internet: <http://www.nrpa.org>
- American Camping Association, 5000 State Road 67 North, Martinsville, IN 46151-7902. Internet: <http://www.acacamps.org>
- American Council on Exercise, 4851 Paramount Dr., San Diego, CA 92123. Internet: <http://www.acefitness.org>
- National Strength and Conditioning Association, 4575 Galley Rd., Suite 400B, Colorado Springs, CO 80915. Internet: <http://www.nsca-lift.org>
- American College of Sports Medicine, PO Box 1440, Indianapolis, IN 46206-1440. Internet: <http://www.acsm.org>

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## Sports & Physical Training Instructors & Coaches

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SOC CODES: 27-2022, 29-9091 and 39-9031

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### Significant Points

- Applicants with a bachelor's degree and extensive experience should have the best job prospects.
- Certification may be required for some positions.
- Almost 1 in 11 were self-employed.

### Nature of the Work

- Sports & physical training instructors & coaches (referred to going forward as *trainers & coaches*) help participants improve their physical fitness and athletic skills. They may instruct groups or individuals of varying skill levels.

**Sports instructors & coaches** teach non-professional sports to students. They organize, lead, and referee indoor and outdoor games.

**Physical training instructors** focus more on physical fitness activities than organized sports. Activities may take place in a gym, health club, or other recreational facility.

**Personal trainers** work one-on-one with clients to evaluate their abilities, determine a suitable training program, offer encouragement, and monitor their correct use of exercise equipment. Trainers may work in health clubs or the client's home.

- Depending on the sport or physical activity involved, different kinds of equipment may be used.

### Working Conditions

- Irregular schedules are common for trainers & coaches. Some are employed on a part-time basis.
- At educational institutions, trainers & coaches may work additional hours during the sports season. Those who coach more than one sport may work year round.
- Activities may occur inside or outside. Travel may be required to attend games and other sporting events.
- Trainers & coaches must guard against injury when participating in activities or instructing others.

### Employment

- Trainers & coaches held about 398,200 jobs in 2004 in the United States and approximately 14,580 jobs in Pennsylvania.
- Over 31 percent were employed with public or private educational institutions, primarily colleges and universities. Others worked in health clubs and recreation clubs. Almost 1 in 11 were self-employed.
- The following table includes the industries that employed the most trainers & coaches in 2004 in Pennsylvania.

Industry	2004 Employment	Percent
Other Amusement & Recreation Industries	3,920	26.9%
Civic & Social Organizations	2,970	20.4%
Colleges & Universities	2,490	17.1%
Self-Employed	1,280	8.8%
Other Schools & Instruction	1,170	8.0%

### Job Outlook

- Employment of trainers & coaches in Pennsylvania is expected to grow from approximately 14,580 in 2004 to approximately 16,490 in 2014. These workers can expect about 191 openings due to growth and about 314 replacement openings for approximately 505 total annual openings.
- Job prospects should be best for those with a bachelor's degree and extensive experience.
- Demand will remain high as long as the public continues to participate in sports as a form of entertainment, recreation and physical conditioning.

### Earnings

- Some trainers & coaches are paid a salary while others are paid by the hour, per session, or based on the number of activity participants.
- The following table includes the average annual, entry level, and experienced level wages in 2005 for various trainers & coaches in Pennsylvania.

Occupational Title	Average Annual Wage	Entry Level Wage	Experienced Level Wage
Coaches & Scouts	\$23,740	\$12,440	\$29,390
Athletic Trainers	\$33,780	\$24,780	\$38,280
Fitness Trainers & Aerobics Instructors	\$21,740	\$13,650	\$25,780

### Training, Other Qualifications and Advancement

Education and training requirements vary greatly by employer, area of expertise and level of responsibility. Previous experience as a participant in the sport or activity may be sufficient. However, some positions require substantial education or experience. Some coaches may have to work their way up through the ranks. Workers that are employed part-time or in smaller facilities are less likely to need formal education, training or certification.

Certification is highly desirable for aspiring instructors or coaches. Applicants must be at least 18 years old and CPR certified. Different organizations provide certification in a variety of sports and activities. Requirements will vary depending on the organization's standards.

Most sports coaches & instructors who are employed with educational institutions have a bachelor's degree. Employers within the education industry try to fill open coaching positions with existing faculty. If no suitable candidates exist, then they hire someone from outside the school district. Those who obtain certification and an appropriate master's degree may have increased opportunities for employment and advancement.

Successful instructors and coaches have good interpersonal skills and are able to relate well to others. They are resourceful, flexible, and able to motivate individuals. Good communication and leadership skills are essential.

### Related Occupations

Workers in other occupations with responsibilities and duties related to those of sports & physical training instructors & coaches include athletic directors, athletic trainers, dietitians, nutritionists, physical therapists, recreational therapists, teachers and umpires.

### Sources of Additional Information

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- American Council on Exercise, 4851 Paramount Dr., San Diego, CA 92123.  
Internet: <http://www.acefitness.org>
- National High School Athletic Coaches Association, P.O. Box 4342, Hamden, CT 06514.  
Internet: <http://www.hscoaches.org>

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## Visual Artists

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SOC CODES: 27-1011, 27-1012, 27-1013 and 27-1014

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### Significant Points

- Training requirements vary greatly, depending upon the specialty.
- Keen competition is expected for all positions.
- Almost 52 percent were self-employed.

### Nature of the Work

- Visual artists use a variety of methods and materials to create art that communicates thoughts, feelings and ideas. They usually fall into one of three categories: fine artists, illustrators or art directors.
- Fine artists display their work in museums, commercial art galleries and private homes. They usually work independently and specialize in one or two art forms.
  - Painters* use shading, color, and perspective to create two-dimensional art forms that depict realistic scenes or abstract expressions.
  - Sculptors* design three-dimensional art works by molding, cutting, and combining a variety of materials.
  - Printmakers* create printed images from designs cut into wood, stone, or metal.
  - Painting restorers* are responsible for preserving and restoring damaged and faded paintings.
- Illustrators paint or draw pictures for publications, films, and other paper products, such as stationery and greeting cards. Many of these artists do a variety of illustrations, while others specialize in a particular style.
  - Medical illustrators* produce illustrations of human anatomy and surgical procedures.
  - Scientific illustrators* concentrate on drawing pictures of animals and plants.
  - Fashion artists* create images of clothing and accessories.
  - Cartoonists* draw political, advertising, social, and sports cartoons.
  - Animators* make the pictures that are used to form the animated cartoons seen in movies and on television.
- *Art directors*, who are responsible for developing design concepts and reviewing the material that is scheduled to appear, often supervise visual artists.

### Working Conditions

- Many visual artists work a standard 40-hour week although some overtime may be required to meet deadlines.
- Self-employed artists often set their own work hours, but much of their time is devoted to selling their service and building a reputation.
- Work is usually performed in design studios or the artist's home. Studio surroundings are usually well-lit and well ventilated. However, visual artists do risk exposure to fumes from paint, ink, and other materials.
- Individuals who spend a great deal of time at drafting tables or in front of computer monitors may experience back pain, eyestrain, or carpal tunnel syndrome.

### Employment

- Visual artists held about 199,800 jobs in 2004 in the United States and around 4,070 jobs in Pennsylvania.
- Over half were self-employed. Others worked for advertising agencies, newspaper publishers and design firms.
- The following table includes the industries that employed the most visual artists in 2004 in Pennsylvania.

Industry	2004 Employment	Percent
Self-Employed	2,110	51.8%
Advertising & Related Services	540	13.1%
Newspaper, Book, & Directory Publishers	200	4.9%

### Job Outlook

- Employment of visual artists in Pennsylvania is expected to grow from approximately 4,070 in 2004 to approximately 4,520 in 2014. Visual artists can expect about 45 openings due to growth and about 88 replacement openings for approximately 133 total annual openings.



- Population growth, rising incomes and an increasing appreciation of the fine arts will stimulate the demand for fine artists. Job prospects will be best for those who have developed a mastery of artistic techniques and skills.
- Illustrators will be needed to prepare materials for printed and electronic media. Growth in the entertainment industry should provide additional opportunities for cartoonists and animators.
- Keen competition is expected for all visual artist positions as the number of qualified applicants outpaces the number of job openings.

### Earnings

- In Pennsylvania, visual artists averaged \$23,600 to \$57,600 annually in 2005. Entry-level visual artists earned between \$18,900 and \$30,700, while experienced visual artists were paid anywhere from \$26,000 to \$71,000.
- The following table includes the average annual, entry level, and experienced level wages in 2005 for visual artists in Pennsylvania.

Occupational Title	Average Annual Wage	Entry Level Wage	Experienced Level Wage
Art Directors	\$57,530	\$30,680	\$70,950
Craft Artists	\$23,670	\$18,930	\$26,040
Fine Artists	\$37,160	\$20,210	\$45,630
Multi-Media Artists & Animators	\$46,570	\$29,020	\$55,350

### Training, Other Qualifications and Advancement

Training requirements for visual artists vary greatly, depending on style specialty. Although formal education is not usually required, it is very difficult to become highly skilled without some training. In fact, many employers prefer to hire applicants who have obtained a four-year degree. For aspiring medical illustrators, advanced education and training is required. As well as artistic ability, these illustrators must have a detailed knowledge of living organisms, medical procedures, and human anatomy.

Many colleges and universities offer training programs that can lead to a Bachelor of Fine Arts (BFA) or a Master of Fine Arts (MFA) degree. In addition, most art schools also offer postsecondary training in the visual arts. Typically, these programs focus more time on studio work than academic courses.

Newly hired visual artists are usually assigned to relatively routine work. While performing basic tasks, individuals may observe experienced artists or practice their own skills. Many artists freelance on a part-time basis while maintaining their full-time job. Others do freelance work while attending school, thereby developing experience and building their portfolio of published work.

Visual artists provide evidence of their talents and skills in a portfolio. Assembling a successful portfolio is essential and requires skills that are usually developed in a postsecondary training program. Internships provide an excellent opportunity for visual artists to enhance their portfolio. In addition to their portfolio, aspiring artists need strong computer and communication skills. Artistic ability and the capacity for creative thinking are also important.

Fine artists and illustrators advance professionally as their work circulates and their reputation is established. An advanced degree may be required for some management, administrative, or teaching positions. Some successful freelance artists open their own business.

### Related Occupations

Workers in other occupations with responsibilities and duties related to those of visual artists include architects, landscape architects, photographers, graphic designers, floral designers, industrial designers, interior designers, web masters, web page designers, and art teachers.

### Sources of Additional Information

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- National Association of Schools of Art and Design, 11250 Roger Bacon Dr., Suite 21, Reston, VA 20190. Internet: <http://www.arts-accredit.org/>
- Association of Medical Illustrators, 6660 Del Monico Dr., #D-107, Colorado Springs, CO 80919-1856. Internet: <http://medical-illustrators.org>
- American Institute of Graphic Arts, 164 Fifth Ave., New York, NY 10010. Internet: <http://www.aiga.org>

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## Writers & Editors

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SOC CODES: 27-3041, 27-3042 and 27-3043

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### Significant Points

- A college degree is required for most positions.
- Job opportunities will be better in smaller media markets.
- Over half worked for publishing companies or were self-employed.

### Nature of the Work

- Writers & editors communicate through the written word. Writers develop original fiction and non-fiction pieces while editors select and review a writer's work.
  - News writers* prepare items for newspapers or news broadcasts.
  - Technical writers* put scientific and technical information into easily understandable language. They may prepare maintenance manuals, catalogs, and assembly instructions.
  - Copywriters* prepare advertising copy for use by publication or broadcast media.
  - Executive editors* have the final say over which stories get published and how they get published.
  - Assistant editors* have editing responsibility for particular subjects, such as local news or sports.
  - Managing editors* are responsible for the daily operation of the news department.
  - Assignment editors* determine which reporters will cover a given story.
  - Copy editors* review and edit a reporter's copy for accuracy, content, grammar and style.
- Many editors and program directors have assistants who review copy, verify information and perform research.
  - Production assistants* arrange page layouts and prepare copy for printing.
  - Publication assistants* evaluate manuscripts and answer letters.
- Writers and editors use personal computers, word processors, and desktop or electronic publishing systems.

### Working Conditions

- Writers and editors usually work 35 to 40 hours per week. Evening and weekend work are common. Overtime may be needed to meet deadlines and cover late-breaking stories.
- Some work in comfortable, private offices. Others work in noisy rooms that are filled with computers.
- The search for information may require travel.
- Deadlines and erratic work hours may cause stress and fatigue.

### Employment

- Writers and editors held about 319,900 jobs in 2004 in the United States and approximately 9,560 jobs in Pennsylvania.
- About 27 percent were employed with newspaper, periodical or book publishers. One in 4 were self-employed.

### Job Outlook

- Employment of writers & editors in Pennsylvania is expected to grow from approximately 9,560 in 2004 to approximately 10,640 in 2014. Writers & editors can expect about 108 openings due to growth and about 214 replacement openings for approximately 322 total annual openings.
- Keen competition is expected for most jobs. Opportunities will be better in smaller media markets.
- Technical writers can expect many openings because of growth in the technology and electronics industries.

### Earnings

- In Pennsylvania, writers & editors averaged \$43,100 to \$52,400 annually in 2005. Entry-level writers & editors earned between \$22,200 and \$34,200, while experienced writers & editors were paid anywhere from \$52,200 to \$61,500.
- The following table includes the average annual, entry level, and experienced level wages in 2005 for writers & editors in Pennsylvania.

Occupational Title	Average Annual Wage	Entry Level Wage	Experienced Level Wage
Editors	\$43,190	\$25,080	\$52,250
Technical Writers	\$52,380	\$34,170	\$61,480
Writers & Authors	\$44,060	\$22,280	\$54,950

### **Training, Other Qualifications and Advancement**

A college degree is required for most writer and editor positions. Employers generally prefer to hire graduates with a degree in communications, journalism or English. For those who specialize in a particular area, such as fashion, additional background in the chosen field is helpful.

School papers, literary magazines, community newspapers and other media outlets provide valuable experience for aspiring writers and editors. Many of these organizations offer internships, sometimes unpaid, that allow students to learn about the publishing or broadcasting business. Interns are usually given basic assignments, like writing short pieces and conducting research.

Writers & editors should have strong communication skills and an ability to concentrate under pressure. Creativity, curiosity, and self-motivation are valuable traits. Good judgment and a strong sense of ethics are needed when deciding what material to publish. Editors also need tact when guiding others in their work. Familiarity with electronic publishing and video production equipment is essential.

Advancement opportunities are limited and usually take the form of assignment to more complex articles. In smaller companies, writers and editors are hired as assistants and may begin writing and editing duties right away. However, jobs are more structured in larger firms. Newly hired individuals perform basic tasks, such as research and editing copy. After gaining experience, workers are slowly assigned to full-scale writing and editing projects.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of writers & editors include news analysts, news reporters, news correspondents, radio announcers, television announcers, advertising workers, public relations workers and teachers.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- Society for Technical Communication, 901 N. Stuart St., Suite 904, Arlington, VA 22203-1822.  
Internet: <http://www.stc.org>
- The Newspaper Guild, 501 Third Street NW, Suite 250, Washington, DC 20001.  
Internet: <http://www.newsguild.org>

# **Hospitality, Tourism and Trade**

## Hospitality, Tourism and Trade Introduction

This section explores occupations in the hospitality, tourism and trade industries. This cluster offers a wide range of opportunities in fields such as retail trade, real estate, food service, cosmetology, travel and tourism.

A substantial percentage of job openings in Pennsylvania are found in retail trade. Retail salespersons and cashiers make up the majority of these openings, which offer many opportunities for part-time work for students and retirees. Rising retail sales, stemming from a growing population, will create many new jobs in this field. Experienced sales workers will have the best chances for advancement into supervisory positions.

Careers in real estate are available for those who enjoy selling. The most successful workers in this highly competitive field have ambition, self-motivation and are willing to work long hours. Experience, individual ability, economic conditions and the type and location of property determine the earnings of real estate agents and brokers, who must be high school graduates and licensed in order to sell real estate.

Food preparation and serving occupations are expected to provide ample job openings in the next decade. While job growth will create new positions, most openings will stem from the need to replace workers who leave this large occupational group. For those planning a career as a cook or chef, a high school diploma is recommended, as well as some vocational school courses in business arithmetic and administration. Earnings of food service workers vary depending on region and type of establishment, with elegant restaurants and hotels usually offering the highest wages.

Another area of concentration in this cluster is cosmetology, where job opportunities should be favorable due to the growing demand for these services. All cosmetologists must be licensed, generally through a cosmetology school. A large segment of these workers are self-employed, but a growing number work for salon owners.

## Hospitality, Tourism and Trade Occupations

The occupations in green are either new to this edition or have had a name change since the last.

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Advertising, Marketing & Public Relations Managers

Barbers & Cosmetologists

Butchers & Cutters

Cashiers

Chefs, Cooks & Kitchen Workers

Counter & Rental Clerks

Demonstrators, Product Promoters & Models

Food & Beverage Service Occupations

Food Service & Lodging Managers

Jewelers

Public Relations Specialists

Purchasing Managers, Buyers & Purchasing Agents

Real Estate Agents & Brokers

**Retail Sales Worker Supervisors**

Retail Salespersons

**Sales Representatives**

**Securities, Commodities & Financial Services Sales Agents**

Services Sales Representatives

Handlers, Equipment Cleaners, Helpers & Laborers

Hotel Desk Clerks

Insurance Sales Agents

Janitors & Cleaning Supervisors

Stock Clerks

**Ticket Agents & Travel Clerks**

Travel Agents

Upholsterers

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(717) 787-6466 or toll-free at 1-877-493-3282.

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## Advertising, Marketing & Public Relations Managers

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SOC CODES: 11-2011, 11-2021, 11-2022 and 11-2031

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### Significant Points

- Competition for jobs will remain intense.
- Opportunities should be best for college graduates who have obtained extensive experience.

### Nature of the Work

- Advertising, marketing & public relations managers coordinate the market research, advertising, promotion, sales, product development and public relations activities of an organization.
- In most companies, **advertising managers** are responsible for a small staff of personnel. Larger staffs may be broken down into specialized departments that have specific advertising duties.

*Account executives* assess the advertising needs of clients and maintain their accounts.

*Creative directors* oversee the development of the advertising's subject matter and presentation.

*Media directors* supervise groups that select the media that will be used to disseminate the advertising.

- *Promotion managers* direct programs that combine advertising with purchase incentives to increase sales.
- *Marketing managers* develop a marketing strategy after determining the demand for products and services that are offered by their company and its competitors.
- *Public relations managers* direct targeted publicity programs and often focus on one area or industry.
- *Sales managers* often assign sales territories, set goals, and establish training programs for the sales representatives. They may advise sales representatives on ways to improve their sales performance.

### Working Conditions

- Managers typically work more than 40 hours per week, including evening and weekend shifts.
- Substantial travel may be required to attend meetings and conferences. Sales managers also travel between headquarters and regional offices.
- During peak business periods, managers may experience intense pressure to meet deadlines and achieve goals.

### Employment

- Advertising, marketing & public relations managers held about 646,400 jobs in 2004 in the United States and approximately 31,740 jobs in Pennsylvania.
- These managers can be found in almost all industry groups. Over 37 percent were employed in the services sector, including management companies, advertising agencies and marketing firms. Another 20 percent worked for manufacturing establishments.
- The following table includes the industries that employed the most advertising, marketing & public relations managers in 2004 in Pennsylvania.

Industry Group	2004 Employment	Percent
Services	11,920	37.5%
Manufacturing	6,430	20.2%
Wholesale & Retail Trade	4,480	14.1%
Finance & Insurance	3,660	11.5%
Information	2,090	6.6%

### Job Outlook

- Employment of advertising, marketing & public relations managers in Pennsylvania is expected to grow from approximately 31,740 in 2004 to approximately 35,980 in 2014. These managers can expect about 425 openings due to growth and about 579 replacement openings for approximately 1,004 total annual openings.
- Demand for these managers is expected to increase as domestic and global competition grows.
- Opportunities should be best for college graduates with extensive experience. Those with new media and interactive marketing skills will be highly sought after.

- Employment growth will vary by industry. It will be strongest in firms that provide consultants to companies that contract out their marketing and public relations services.

### **Earnings**

- In Pennsylvania, advertising, marketing & public relations managers averaged \$74,000 to \$94,200 annually in 2005. Entry-level managers earned between \$34,200 and \$48,600, while experienced managers were paid anywhere from \$91,700 to \$117,000.
- The following table includes the average annual, entry level, and experienced level wages in 2005 for advertising, marketing & public relations managers in Pennsylvania.

Occupational Title	Average Annual Wage	Entry Level Wage	Experienced Level Wage
Advertising & Promotions Managers	\$74,800	\$34,210	\$95,090
Marketing Managers	\$94,180	\$48,580	\$116,970
Sales Managers	\$90,950	\$45,690	\$113,580
Public Relations Managers	\$74,050	\$38,610	\$91,770

### **Training, Advancement and Other Qualifications**

A variety of educational backgrounds are suitable for entry into a career in advertising, marketing and public relations. However, employers generally prefer to hire those with a college degree in a related field. For highly technical industries, applicants may need a bachelor's degree in engineering or science as well as a master's degree in business administration. For all specialties, completion of management courses and participation in an internship are highly recommended.

Most advertising, marketing & public relations manager positions are filled by promoting experienced staff from within the organization. In smaller firms, these opportunities come slowly. Because of this, many personnel will transfer to a larger company after gaining some experience. Regardless of the size of the organization, advancement opportunities can be accelerated by participation in a management-training program. Companies will commonly pay for these courses if they are successfully completed. In addition, many firms provide employees with continuing education opportunities, either in-house or at a local college.

Several professional associations offer voluntary certification, which recognizes competence and achievement in a field. This is particularly important in a competitive job market. Although relatively few are currently certified, the number of managers who seek certification is expected to grow.

Maturity, creativity and decisiveness are important traits for aspiring advertising, marketing, and public relations managers. Tact and good judgment are needed to maintain relationships with clients and staff. In addition, managers should be highly motivated. Strong communication and computer skills are also essential.

Advertising, marketing, and public relations managers are often prime candidates for advancement because of the high visibility of their work. Successful individuals may eventually become top executives. With extensive experience and sufficient capital, some even open their own business.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of advertising, marketing & public relations managers include art directors, artists, writers, editors, commercial artists, copywriters, lobbyists, marketing research analysts, public relations specialists, promotion specialists, and sales representatives.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- Sales and Marketing Executives International, PO Box 1390, Sumas, WA 98295-1390.  
Internet: <http://www.smei.org>
- American Association of Advertising Agencies, 405 Lexington Ave., New York, NY 10174-1801.  
Internet: <http://www.aaaa.org>
- The American Advertising Federation, 1101 Vermont Ave. NW, Suite 500, Washington, DC 20005-6306.  
Internet: <http://www.aaf.org>
- Public Relations Society of America, 33 Maiden Lane, 11<sup>th</sup> Floor, New York, NY 10038-5150.  
Internet: <http://www.prsa.org>



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## Barbers & Cosmetologists

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SOC CODES: 39-5011, 39-5012, 39-5091, 39-5092, 39-5093 and 39-5094

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### Significant Points

- Licensure is required in Pennsylvania.
- Job opportunities should be excellent as employers report difficulties finding qualified applicants.
- About one-third are self-employed.

### Nature of the Work

- Barbers & cosmetologists are responsible for shampooing, cutting, and styling hair. A growing number also sell hair products and cosmetic supplies.

*Barbers* often shave male customers, fit hairpieces, and provide scalp treatments.

*Cosmetologists*, also called hairstylists, may advise patrons on hair care and makeup analysis. They may straighten, perm, or color hair.

*Manicurists* provide nail services, such as manicures and pedicures.

*Estheticians* cleanse and beautify the skin through facials, massages, and waxing.

*Electrologists* remove hair using an electrolysis machine.

*Shampooers* specialize in shampooing and conditioning hair.

- In addition to their work with customers, barbers & cosmetologists are expected to keep their work area clean and their tools sanitized. They may keep records of hair color and permanent wave formulas used by their regular patrons.
- Individuals who operate their own salons also have managerial duties, such as hiring employees, keeping records, and ordering supplies.

### Working Conditions

- Full-time barbers & cosmetologists usually work a 40-hour week. Longer hours, including evening and weekend shifts, are common. In addition, many have variable shifts or work part-time.
- Barbers & cosmetologists spend most of the day on their feet, working in clean surroundings that have good lighting and ventilation.
- Prolonged exposure to some hazardous hair and nail chemicals may cause irritation. Special care must be taken when handling them.

### Employment

- Barbers & cosmetologists held 789,600 jobs in 2004 in the United States and approximately 39,230 jobs in Pennsylvania.
- More than 60 percent worked in beauty shops. Another 36 percent were self-employed. Others were employed with department stores.

### Job Outlook

- Employment of barbers & cosmetologists in Pennsylvania is expected to grow from approximately 39,230 in 2004 to approximately 45,940 in 2014. Barbers & cosmetologists can expect about 671 openings due to growth and about 788 replacement openings for approximately 1,459 total annual openings.
- Job opportunities should be excellent as employers report difficulties finding qualified applicants. However, competition will be keen at higher paying, prestigious salons.
- Although the employment level of barbers is expected to decline, there will many job openings due to a large number of retirements and a relatively small number of licensed applicants.
- The rapid growth rate of spa salons, which offer a full range of services, is expected to generate numerous job openings for cosmetologists. Employment demand for colorists and manicurists will also continue to climb.

### Earnings

- In 2005, barbers earned the highest wages at all levels of experience. Shampooers earned the lowest wages.
- The following table includes the average annual, entry level, and experienced level wages in 2005 for barbers & cosmetology workers in Pennsylvania.

Occupational Title	Average Hourly Wage	Entry Level Wage	Experienced Level Wage
Barbers	\$11.81	\$9.67	\$12.88
Hairdressers, Hairstylists & Cosmetologists	\$9.36	\$6.34	\$10.87
Makeup Artists, Theatrical & Performance	N/A	N/A	N/A
Manicurists & Pedicurists	\$8.46	\$6.00	\$9.70
Shampooers	\$6.63	\$5.93	\$6.99
Skin Care Specialists	\$9.71	\$6.71	\$11.21

- No Pennsylvania-specific information was available for makeup artists. However, the average hourly wage nationwide for makeup artists in 2005 was \$15.70.
- Barbers & cosmetologists receive income from a variety of sources. They may receive any combination of base salary, tips and commissions. In addition, bonuses may be given to employees who bring in new business.

### **Training, Other Qualifications and Advancement**

Barbers & cosmetologists learn their skills through educational programs offered at state-licensed vocational schools. Daytime and evening classes are available. Most full-time programs last 10 to 24 months. However, less training may be required for manicurists, estheticians and electrologists. Students study basic cosmetology services, such as unisex haircutting and shaving. Educational programs also include demonstrations and practical work.

Graduates of an approved training program can take the state licensing examination. Applicants are required to pass a written test and demonstrate their practical skills. In Pennsylvania, all barbers & cosmetologists must be licensed. Separate examinations and licenses are available for different cosmetology occupations.

Entry-level barbers & cosmetologists are assigned to simpler hairstyling patterns. They are allowed to perform more complicated tasks as they gain experience. Additional training may be required to learn the unique techniques used in each salon. Because hairstyles are constantly changing, barbers & cosmetologists must keep abreast of the latest trends. To do this, they attend training sessions and trade shows.

Successful barbers & cosmetologists have an understanding of fashion, art and technical design. They enjoy dealing with the public and are willing to follow instructions. Communication and attitude play an important role in their success. Modern-day barbers & cosmetologists must be effective salesmen as well.

Advancement usually takes the form of higher earnings. With several years of experience, barbers & cosmetologists may become salon managers. Some take positions as beauty consultants, cosmetology teachers, sales representatives or licensing examiners. Others open their own shop.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of barbers & cosmetologists include beauty consultants, make-up artists, wig specialists and beauty supply distributors.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- Pennsylvania Academy of Cosmetology Arts and Sciences, 2445 Bedford Street, Johnstown, PA, 15904. Internet: <http://www.pacas.com/>
- National Accrediting Commission of Cosmetology Arts and Sciences, 4401 Ford Ave., Suite 1300, Alexandria, VA 22302-1432. Internet: <http://www.naccas.org>
- National Cosmetology Association, 401 N. Michigan Ave., 22nd floor, Chicago, IL 60611. Internet: <http://www.salonprofessionals.org>

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## Butchers & Cutters

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SOC CODES: 51-3021, 51-3022 and 51-3023

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### Significant Points

- Opportunities will be best for lower skilled meat, poultry & fish cutters.
- Workers in meatpacking plants are among the most susceptible to injury and illness of all workers.

### Nature of the Work

- Butchers & cutters are employed at different stages in the process that converts animal carcasses into manageable pieces of meat suitable for sale to wholesalers or consumers.
- In meatpacking plants, **meat cutter**, or **slaughterers**, slaughter animals and make large wholesale cuts of meat. Meat cutters also produce hamburger meat and meat trimmings, which are used to prepare sausages and luncheon meats. Work is done on assembly lines and each individual is responsible for only a few cuts.
- In grocery stores, wholesale establishments and institutional food service facilities, **butchers** separate wholesale cuts of meat into retail cuts or individual size servings. Butchers in retail food stores may also weigh, wrap, and label the cuts of meat, arrange them in the display, and prepare special cuts of meat to fill unique orders.
- **Poultry cutters** slaughter and cut up chickens, turkeys, and other types of poultry. As in the meatpacking industry, most poultry cutters perform routine cuts as the poultry moves along assembly lines.
- **Fish cutters**, also called *fish cleaners*, are likely to be employed in both manufacturing and retail establishments. These workers remove the head, scales, and other inedible portions from the fish and cut the fish into steaks or boneless fillets. In retail markets, they may also wait on customers and clean fish to order.
- Many butchers & cutters are members of the United Food and Commercial Workers International Union.

### Working Conditions

- Working conditions vary by type and size of establishment. In meatpacking plants and large retail food establishments, butchers and meat cutters work in large rooms equipped with power machines and conveyors. In small retail markets, they may work in a space behind the meat counter. To avoid viral and bacterial infections, work areas must be kept clean and sanitary.
- Butchers & cutters often work in cold, damp rooms. The low temperature, combined with the need to stand for long periods of time and perform physical tasks, makes the work tiring.
- Cool damp floors increase the likelihood of slips and falls. Cuts, and even amputations, can occur when knives, cleavers, and power tools are used improperly. In fact, butchers & cutters are more susceptible to injury than most other workers.
- Repetitive slicing and lifting often lead to cumulative trauma injuries, such as carpal tunnel syndrome. To reduce the incidence of these injuries, employers have reduced workloads, redesigned jobs, and tools and increased awareness of early warning signs.

### Employment

- Butchers & cutters held about 410,800 jobs in 2004 in the United States and approximately 13,280 jobs in Pennsylvania.
- About 46 percent worked in animal processing plants. Grocery stores employed another 38 percent. Others worked for wholesale grocery companies or specialty food stores.

### Job Outlook

- Employment of butchers & cutters in Pennsylvania is expected to decrease from approximately 13,280 in 2004 to approximately 13,030 in 2014. About 299 annual openings will result from replacement needs. Although no net employment growth is expected statewide, growth openings may occur in some areas.
- As meat cutting shifts from retail stores to food processing plants and the demand for labor-intensive, ready-to-heat goods increases, more meat, poultry & fish cutters will be needed.
- Automation and the consolidation of the meatpacking and poultry processing industries will result in less work for highly skilled butchers & meat cutters and a declining demand for their employment.

### Earnings

- The following chart includes the average hourly, entry level, and experienced level wages in 2005 for butchers & cutters in Pennsylvania.

Occupational Title	Average Hourly Wage	Entry Level Wage	Experienced Level Wage
Butchers & Meat Cutters	\$12.87	\$8.40	\$15.10
Meat, Poultry & Fish Cutters & Trimmers	\$11.00	\$8.38	\$12.31
Slaughterers & Meat Packers	\$10.24	\$8.75	\$10.99

### **Training, Other Qualifications and Advancement**

Most butchers & cutters acquire their skills on the job through formal and informal training programs. The length of this training can vary significantly. The training period for a highly skilled butcher at the retail level may last up to two years.

Trainees generally start with less difficult jobs, such as simple cuts or removing bones. Under the guidance of experienced workers, they learn the proper use of tools and equipment and how to prepare various cuts of meat. Trainees may also learn to roll and tie roasts, prepare sausage, and cure meat. Those employed in retail stores are often taught inventory control, meat buying, and record keeping as well. In addition, growing concern about the safety of meats has led employers to offer extensive training in food safety.

Manual dexterity, good depth perception, color discrimination, and good hand-eye coordination are important skills in meat, poultry and fish cutting. Physical strength is often needed to lift and move heavy pieces of meat. Those who wait on customers should have a pleasant personality, a neat appearance, and the ability to communicate clearly.

Butchers & cutters may progress to supervisory jobs. A few become meat or seafood buyers for wholesalers or supermarket chains. Some open their own meat or fish markets.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of butchers & cutters include bakers, chefs, cooks and food preparation workers.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- United Food and Commercial Workers International Union, 1775 K St. NW, Washington, DC 20006. Internet: <http://www.ufcw.org>

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## Cashiers

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SOC CODE: 41-2011

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### Significant Points

- Part-time employment opportunities are expected to be good.
- Employers look for high school graduates to fill full-time positions.
- Most were employed with retail organizations, such as grocery stores.

### Nature of the Work

- *Cashiers* total purchases, take payments, make change, and issue receipts. They may also handle returns, bag items, furnish money orders, issue tickets, and answer customer questions.
- Although specific job duties may vary, cashiers are usually assigned to a register and given drawers containing “banks” of money. They are responsible for the money in their “bank.” An occasional shortage of small amounts may be overlooked, but repeated shortages are often grounds for dismissal.
- Cashiers must be familiar with company policies and procedures for all types of acceptable payment. This often includes cash and personal checks, as well as charge and debit cards.
- Many establishments use sophisticated equipment, such as scanners and computers, to transmit the Universal Product Code (UPC) to a computer, which identifies the item and its price.

### Working Conditions

- Many cashiers work part-time. Weekends, evening, and holiday work is expected. However, many employers offer flexible schedules.
- Vacation time is often restricted from Thanksgiving through the beginning of January because of the busy holiday season.
- Most cashiers work indoors, standing in booths, or behind counters. They are often unable to leave their workstations without approval because they are responsible for large sums of money.
- The work can be very repetitious but improvements are being made to combat this problem. In addition, the threat of robbery can make this work dangerous.

### Employment

- Cashiers held about 3.5 million jobs in 2014 in the United States and around 162,430 jobs in Pennsylvania.
- Although employed in almost every industry, most cashiers worked for retail trade companies, such as grocery and drug stores. Others worked in service stations, department stores and restaurants.
- The following table includes the industries that employed the most cashiers in 2004 in Pennsylvania.

Industry	2004 Employment	Percent
Grocery Stores	45,670	28.1%
Gasoline Stations	18,780	11.6%
Health & Personal Care Stores	12,330	7.6%
Other General Merchandise Stores	11,770	7.2%
Limited-Service Eating Places	8,880	5.5%

### Job Outlook

- Employment of cashiers in Pennsylvania is expected to decrease from approximately 162,430 in 2004 to approximately 155,560 in 2014. About 7,903 annual openings will result from replacement needs. Although no net employment growth is expected statewide, growth openings may occur in some areas.
- Opportunities for part-time work are expected to be excellent, due to rapid employment growth and the need to replace the large number of workers who transfer or leave the labor force.
- Younger workers, those under the age of 25, have filled many of the openings in this occupation. Some establishments have begun hiring elderly and disabled persons as well to fill some of their job openings.

### **Earnings**

- Average hourly earnings of cashiers in Pennsylvania were \$7.71 in 2005. The entry-level rate in 2005 was \$5.90 while an experienced cashier made \$8.62.
- Benefits tend to be better for full-time cashiers than for those working part-time. Full-time workers often receive health and life insurance in addition to paid vacations. Some employers even offer employee stock option plans and education reimbursement plans.
- Those working in retail establishments often receive discounts on purchases while cashiers employed by restaurants receive free or low-cost meals.

### **Training, Other Qualifications and Advancement**

Cashier jobs tend to be entry-level positions requiring little or no previous work experience. In fact, most cashiers are trained on the job. Training includes observing experienced cashiers and becoming familiar with the store's equipment, policies, and procedures. Trainees are then assigned to a register of their own, under the supervision of a more experienced worker. In larger businesses, trainees may spend several days in classes. Additional training is not common, except when new equipment is introduced or when procedures change.

Cashiers need basic mathematics skills and good manual dexterity. They should be able to do repetitious work accurately. A neat appearance and an ability to deal tactfully and pleasantly with customers are essential.

Employers filling full-time jobs often prefer applicants with high school diplomas. However, advancement opportunities for cashiers vary. Those working part-time may be promoted to a full-time position. Others may advance to head cashier or cash office clerk. Furthermore, this job can serve as a steppingstone to a more responsible position within the company.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of cashiers include food and beverage service workers, bank tellers, counter and rental clerks, postal clerks, mail carriers, and retail salespeople.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- United Food and Commercial Workers International Union, 1775 K St. NW, Washington, DC 20006-1502. Internet: <http://www.ufcw.org>
- National Retail Federation, 325 7th St. NW, Suite 1100, Washington, DC 20004. Internet: <http://www.nrf.com>
- National Association of Convenience Stores, 1605 King St., Alexandria, VA 22314-2792. Internet: <http://www.nacsonline.com>

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## Chefs, Cooks & Kitchen Workers

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SOC CODES: 35-1011, 35-2011, 35-2012, 35-2014, 35-2015, 35-2019, 35-2021, 35-9021 and 51-3011

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### Significant Points

- Job opportunities will be best for those with advanced skills.
- Skills are usually acquired through on-the-job training.

### Nature of the Work

- Chefs, cooks & kitchen workers are largely responsible for establishing and maintaining the reputation of a restaurant. They may plan meals, develop menus, and order food supplies.

*Institutional chefs and cooks* work in the kitchens of schools, hospitals and other institutions. These workers prepare a large quantity of a limited number of entrees, vegetables, and desserts.

*Restaurant chefs and cooks* prepare a wider selection of dishes. In fact, they cook most orders individually.

*Short-order cooks* often work on several food orders at one time. They may grill hamburgers, prepare sandwiches, fry eggs, and cook French fries.

*Specialty fast-food cooks* prepare a limited selection of menu items in fast-food restaurants.

- *Bakers* prepare baked goods for restaurants, institutions, and retail bakery shops. Most work is done by hand.
- Other *kitchen workers* perform tasks that required less skill, such as measuring ingredients and cleaning work areas. Chefs and cooks usually supervise these workers.
- In larger restaurants, menus are more varied and much of the food is made from scratch.

### Working Conditions

- Chefs, cooks & kitchen personnel work a variety of shifts, including early mornings, late evenings, and weekends. Part-time work is also very common.
- Workplace conditions can vary with the type and quantity of food being prepared. Employees often work in close quarters, operate hot ovens, and stand for long periods of time.
- Precautions must be taken to avoid injury from slips, falls, cuts and burns.

### Employment

- Chefs, cooks & kitchen workers held 3.8 million jobs in 2004 in the United States and approximately 157,240 jobs in Pennsylvania.
- Over 56 percent were employed in retail eating and drinking establishments. Others worked in grocery stores, educational institutions and nursing homes.
- The following table identifies the industries that employed the most chefs, cooks & kitchen workers in 2004 in Pennsylvania.

Industry	2004 Employment	Percent
Full-Service Restaurants	48,960	31.1%
Limited-Service Eating Places	28,100	17.9%
Elementary & Secondary Schools	12,800	8.1%
Grocery Stores	12,390	7.9%

### Job Outlook

- Employment of chefs, cooks & kitchen workers in Pennsylvania is expected to grow from approximately 157,240 in 2004 to approximately 176,790 in 2014. These workers can expect about 1,955 openings due to growth and about 5,011 replacement openings for approximately 6,966 total annual openings.
- Projected increases in population, income and leisure time will stimulate the demand for chefs, cooks & kitchen workers. Opportunities will be best for those with advanced skills.
- Employment growth will be slowest for institutional and cafeteria cooks as many institutions contract out their food services.

### Earnings

- In Pennsylvania, chefs, cooks & kitchen workers averaged \$7.10 to \$16.30 per hour in 2005. Entry-level rates were between \$5.90 and \$9.88 per hour, while experienced chefs, cooks, and other kitchen workers earned anywhere from \$7.70 to \$19.60 per hour.
- The following table includes the average hourly, entry level, and experienced level wages in 2005 for chefs, cooks & kitchen workers in Pennsylvania.

Occupational Title	Average Hourly Wage	Entry Level Wage	Experienced Level Wage
Chefs & Head Cooks	\$16.30	\$9.88	\$19.51
Cooks, Fast Food	\$7.12	\$5.91	\$7.73
Cooks, Institution & Cafeteria	\$10.19	\$7.31	\$11.63
Cooks, Restaurant	\$9.74	\$7.03	\$11.09
Cooks, Short Order	\$8.41	\$6.13	\$9.55
Cooks, Other	\$9.18	\$7.57	\$9.98
Food Preparation Workers	\$8.34	\$6.37	\$9.32
Dishwashers	\$7.16	\$5.91	\$7.79
Bakers	\$10.74	\$7.18	\$12.52

### Training, Other Qualifications and Advancement

Most entry-level positions require little education. In fact, skills are often learned through on-the-job training. Workers are usually hired as fast food cooks or other kitchen workers. After acquiring basic food handling, preparation and cooking skills, they advance to assistant or short order cook positions. People who have completed some postsecondary training may be hired directly into a chef or cook job without having to spend time in a lower-skilled kitchen job.

Years of training and experience are needed to achieve the level of skill required to become an executive chef or cook. An increasing number of people obtain training through postsecondary programs, which may last anywhere from a few months to a few years. Trade schools, vocational centers, colleges, professional associations and the Armed Forces all offer training. Aspiring chefs and cooks may also participate in apprenticeship programs. Some large hotels and restaurants even operate their own in-house training. Although specific curricula can vary, students in these programs spend most of their time learning through hands-on practice.

Chefs, cooks, pastry professionals and culinary educators may obtain certification through The American Culinary Federation. Certification standards are based on experience and formal training. Varying levels of certification exist for chefs and cooks. Designations include cook, working chef, executive chef and master chef.

To fill open positions, employers look for applicants who are capable of working as part of a team. A keen sense of taste and smell is very important. High school courses in arithmetic and business administration may be beneficial. Although a high school diploma is not required for entry-level jobs, it is highly recommended for those individuals planning a career as a cook or chef.

Advancement opportunities are favorable for chefs and cooks. Many enhance their skills and increase their salary by transferring from one job to another. With experience, chefs and cooks may be promoted to supervisory or executive chef positions. A few take positions as instructors in postsecondary programs. Others open their own restaurant or catering business.

### Related Occupations

Workers in other occupations with responsibilities and duties related to those of chefs, cooks & kitchen workers include butchers, meat cutters, and cannery workers.

### Sources of Additional Information

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- The National Restaurant Association, 1200 17th St. NW. Washington, DC 20036. Internet: <http://www.restaurant.org>



- American Culinary Federation, 180 Center Place Way, St. Augustine, FL 32086.  
Internet: <http://www.acfchefs.org>
- International Council on Hotel, Restaurant, and Institutional Education, 2613 North Parham Rd., 2nd Floor, Richmond, VA 23294. Internet: <http://www.chrie.org>

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## Counter & Rental Clerks

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SOC CODE: 41-2021

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### Significant Points

- Many opportunities for part-time employment will exist.
- Employers look for high school graduates to fill full-time positions.

### Nature of the Work

- **Counter & rental clerks** answer questions involving product availability, cost and rental provisions. They may also take orders, calculate fees, receive payments and accept returns.
- Regardless of their employer, workers must be familiar with the company's services, policies, and procedures.
- Some counter and rental clerks write out tickets and order forms, although most use computers or bar code scanners. These computer systems are user friendly, require very little data entry and are customized for the establishment. Clerks must insure that the data read by the scanner accurately matches the product.

### Working Conditions

- Some counter & rental clerks work 40-hour weeks, but many work part-time. Part-time clerks are expected to work weekends, evenings and holidays. However, many employers do offer flexible schedules.
- Stores and service establishments that employ counter and rental clerks are usually clean, well-lit, and temperature controlled.
- Clerks spend much of their time standing behind a small counter area.
- This job requires constant interaction with the public and can be taxing, especially during busy periods.

### Employment

- Counter & rental clerks held about 451,000 jobs in 2004 in the United States and approximately 19,330 jobs in Pennsylvania.
- About 14 percent were employed with video rental stores. Others worked for dry cleaners, grocery stores and automobile dealerships.
- The following table includes the industries that employed the most counter & rental clerks in 2004 in Pennsylvania.

Industry	2004 Employment	Percent
Consumer Goods Rental	2,740	14.2%
Dry-cleaning & Laundry Services	2,370	12.2%
Other Amusement & Recreation Industries	2,070	10.7%
Grocery Stores	1,400	7.2%
Automobile Dealers	1,230	6.4%

### Job Outlook

- Employment of counter & rental clerks in Pennsylvania is expected to grow from approximately 19,330 in 2004 to approximately 22,360 in 2014. Counter & rental clerks can expect about 304 openings due to growth and about 740 replacement openings for approximately 1,044 total annual openings.
- Opportunities for part-time work are expected to be excellent, due to businesses' desire to improve customer service and the need to replace the large number of workers who transfer or leave the labor force.
- Most new jobs will be created in firms that rent or lease equipment, automobiles or videotapes.

### Earnings

- Average hourly earnings of counter & rental clerks in Pennsylvania were \$10.06 in 2005. The entry-level rate in 2005 was \$6.16 while an experienced clerk made \$12.01.
- Many companies offer discounts to their counter & rental clerks on the services they provide.

### **Training, Other Qualifications and Advancement**

Counter & rental clerk jobs are primarily entry-level positions that require little experience or formal education. However, many employers prefer applicants with a high school diploma. In certain industries, these jobs may be an additional or alternate source of income for workers who are unemployed or entering semi-retirement.

In most companies, counter & rental clerks are trained on the job. They learn how to operate the equipment under the supervision of experienced employees. They must also become familiar with the company's policies and procedures. Larger companies may offer formal training programs that last a few hours to a few weeks.

Counter & rental clerks must enjoy working with people. They should have the ability to deal tactfully with difficult customers and handle several tasks at once. Good communication skills, both oral and written, are also essential.

Advancement opportunities depend on the size and type of company. Many establishments that employ counter or rental clerks tend to be small businesses, making advancement difficult. In larger establishments, jobs such as counter & rental clerks can be stepping-stones to more responsible positions. Many counter & rental clerks are promoted to assistant manager positions.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of counter & rental clerks include bank tellers, cashiers, food and beverage service workers, postal clerks, and retail salespersons.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- American Rental Association, 1900 19th St., Moline, IL 61265. Internet: <http://www.ararental.org>
- International Fabricare Institute, 12251 Tech Rd., Silver Spring, MD 20904. Internet: <http://www.ifi.org>

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## Demonstrators, Product Promoters & Models

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SOC CODES: 41-9011 and 41-9012

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### Significant Points

- Opportunities for demonstrators & product promoters should be plentiful but limited for models.
- Most jobs are part-time, short-term positions.
- Many jobs require frequent employer-paid travel.

### Nature of the Work

- Demonstrators & product promoters create public interest in buying a product by demonstrating it to prospective customers and answering their questions. They often prepare the presentation, participate in exhibit design, or are involved in transporting, assembling and disassembling materials used in the demonstration. They may also sell the product.

*Demonstrators* promote sales of a product to consumers.

*Product promoters* try to persuade retail stores to sell particular products.

- Locations for demonstrations are based on the product and intended audience. Sites include retail shops, grocery stores, shopping malls, trade shows and outdoor fairs. Other demonstrators promote their products on videotape, “infomercials” or home shopping programs.
- Models pose for photos or as subjects for paintings or sculptures. They often display clothing and accessories or promote items such as beauty products, books, calendars and fitness videos. In addition, they may appear in movies and television shows.
- There are different categories of modeling jobs, but many models do a combination of work. Some models do specialize in a certain area of work.

*Editorial print modeling* uses still photographs for magazine covers and to accompany feature articles.

*Commercial print modeling* includes work for advertisements in magazines and newspapers, and outdoor advertisements such as billboards.

*Catalog models* appear in department store and mail order catalogs.

*Live modeling* involves product demonstration to a live audience at locations such as showrooms, runways, and retail shops.

- Models work closely with photographers, hairstylists, make-up artists and clients to produce the desired look and to finish the photo shoot on schedule. Sometimes models must apply their own make-up and bring their own clothing.
- Almost all models work through agents, who scout for new faces, offer advice, train models and promote them to clients. Agents help models assemble and maintain portfolios, print composite cards and travel to auditions. A portfolio is a collection of a previous work that is carried to all auditions and bookings. A composite card, or comp card, contains the best photographs from a model’s portfolio along with his or her measurements.

### Working Conditions

- Many demonstrators, product promoters & models work part-time. Their positions are often short term, lasting 6 months or less. Night and weekend work is often required.
- Long hours spent standing or walking, little opportunity to rest and a variety of working conditions are commonplace.
- Because the atmosphere of a location is often hectic, these workers may feel pressured. However, many enjoy the opportunity to interact with a variety of people.
- Models must keep in constant touch with an agent so they do not miss an opportunity for work.

### Employment

- Demonstrators, product promoters & models held about 120,300 jobs in 2004 in the United States and approximately 4,850 jobs in Pennsylvania.
- About 31 percent were employed with retail trade organizations. Others worked for companies that provide support services. Almost 1 in 7 were self-employed.
- The following table includes the industries that employed the most demonstrators, product promoters & models in 2004 in Pennsylvania.

Industry	2004 Employment	Percent
Other Support Services	830	17.2%
Other General Merchandise Stores	720	14.8%
Self-Employed	690	14.3%
Employment Services	500	10.3%
Sporting Goods/Musical Instrument Stores	400	8.2%

### **Job Outlook**

- Employment of demonstrators, product promoters & models in Pennsylvania is expected to grow from approximately 4,850 in 2004 to approximately 5,340 in 2014. These workers can expect about 49 openings due to growth and about 108 replacement openings for approximately 157 total annual openings.
- Although job openings should be plentiful for demonstrators & product promoters, employers may have difficulty finding qualified applicants who are willing to fill part-time, short-term positions.
- Aspiring models can expect keen competition for limited job openings. Increasing diversification will require models representative of diverse racial and ethnic groups. Furthermore, work for male models should increase as society becomes more receptive to the marketing of men's fashions.
- Fashion changes frequently and models often experience periods of unemployment.
- Employment levels may be affected by downturns in the business cycle.

### **Earnings**

- Average hourly earnings of demonstrators & product promoters in Pennsylvania were \$12.42 in 2005. The entry-level hourly wage in 2005 was \$6.88 while an experienced demonstrator earned \$15.18 per hour.
- Average hourly earnings of models in Pennsylvania were \$16.99 in 2005. The entry-level hourly wage in 2005 was \$10.71 while an experienced model earned \$20.13 per hour.
- Earnings vary for different types of modeling and depend on the experience of the model. Hourly earnings can be relatively high but models may not work every day or their jobs may last only a few hours. Female models typically earn more than male models. Agents often receive 15 to 20 percent of a model's earnings.
- Models occasionally receive clothing or clothing discounts instead of, or in addition to, regular earnings. When immediate work cannot be found, they may receive advance payments to cover expenses. Models must provide their own health and retirement benefits. However, employers generally pay for job-related travel expenses.

### **Training, Other Qualifications, and Advancement**

Demonstrators & product promoters usually receive on-the-job training. The length of training varies with the complexity of the product. In fact, prior experience may be required for complex products such as computers. During the training process, demonstrators and product promoters are familiarized with the product, the manufacturer's corporate philosophy, and preferred methods for dealing with customers.

Employers look for a pleasant appearance and an out-going personality in their demonstrators & product promoters. Strong communication and public speaking skills are essential. The ability to entertain an audience and use humor, spontaneity, and personal interest in the product is helpful. Foreign language skills are helpful in many areas of the country. Those who perform well and show leadership ability may advance to other marketing and sales occupations or open their own businesses.

Like demonstrators & product promoters, no formal training is required to begin a modeling career. Aspiring models should be photogenic and have a basic knowledge of hair styling, make-up and clothing. Successful models must be within certain ranges for height, weight and clothing size. Most designers feel their clothing looks its best on tall, thin models. In order to preserve their physical characteristics, models must control their diet, exercise regularly and get enough sleep in order to stay healthy.

Aspiring models must be able to move gracefully and confidently. They should be professional, polite and prompt. Busy models need strong organizational skills. Training in acting, voice, and dance is useful and allows a model to be considered for television work. Foreign language skills are useful when traveling to foreign countries.

Modeling schools provide training in posing, walking, and make-up application. However, many agents discourage their clients from attending these schools. The selection of a modeling agency is an important factor in a model's career. The better the reputation and skill of the agency, the more assignments models are likely to get. Most clients prefer to work with agents so a freelance career is very difficult.

Agents continually scout for new faces. They review snapshots, have open calls, where models are seen in person, or sponsor modeling contests and searches. Very few people who send in snapshots or attend open calls are

offered contracts. Agents often advise models on how to dress, wear make-up, and conduct themselves during auditions and bookings. Because advancement depends on previous work, development of a good portfolio is key to getting assignments. Opportunities will be best for models that have high quality, current photos in their portfolio. However, many modeling careers are short and most individuals must transfer to other occupations.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to demonstrators, product promoters & models include retail sales workers, sales representatives, travel agents, insurance agents, real estate brokers and actors.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- The Models Guild, Office and Professional Employees International Union, AFL-CIO, CLC, 265 W 14th Street, 6<sup>th</sup> Floor, New York, NY 10011-7101.

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## Food & Beverage Service Occupations

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SOC CODES: 35-3011, 35-3021, 35-3022, 35-3031, 35-3041, 35-9011 and 35-9031

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### Significant Points

- Many job opportunities exist for people who are willing to work part-time.
- Skills are usually obtained through on-the-job training.

### Nature of the Work

- Food & beverage service workers aim to help customers have a positive dining experience.  
*Waiters & waitresses* are responsible for taking customer orders and serving food. They may also prepare checks, accept payments, and clear tables.  
*Bartenders* mix and serve drinks. Other duties include serving food, collecting payments, and cleaning up.  
*Hosts and hostesses* welcome guests, escort them to their tables, and provide menus. They may also schedule reservations, arrange parties, and act as cashiers.  
*Counter attendants* take orders and serve food at counters. They may also prepare fountain specialties and some short-order items for carry out.  
*Fast-food workers* serve customers at counters or drive-through windows. They pick up the ordered items, present them to the customer, and accept payment.  
*Dining room attendants & bartender helpers* assist waiters, waitresses, and bartenders by cleaning tables, removing dirty dishes, and keeping serving areas stocked with supplies.
- Individuals may perform additional duties, depending on the type of establishment in which they work.

### Working Conditions

- Part-time work is very common in food & beverage service occupations. Most personnel work a variety of shifts, including evenings, weekends, and holidays. This creates work opportunities that are attractive to students and other individuals seeking supplemental income.
- Food and beverage service workers spend most of the day on their feet and often carry heavy trays of food, dishes, and glassware.
- During busy periods, workers face pressure to serve customers quickly and efficiently.
- Although this work is relatively safe, precautions must be taken to avoid injury from slips, falls, and burns.

### Employment

- Food & beverage service workers held 6.3 million jobs in 2004 in the United States and approximately 257,730 jobs in Pennsylvania.
- Almost 73 percent were employed with retail eating and drinking places, such as restaurants and bars. Others worked in hotels, grocery stores, country clubs and bowling alleys.

### Job Outlook

- Employment of food & beverage service workers in Pennsylvania is expected to grow from approximately 257,730 in 2004 to approximately 285,120 in 2014. These workers can expect about 2,739 openings due to growth and about 11,935 replacement openings for approximately 14,674 total annual openings.
- Most food & beverage service occupations will have great demand.
- Openings are always plentiful because there is substantial movement into and out of these occupations.
- Keen competition is expected for jobs in fine dining establishments, where customer tips are usually greatest.

### Earnings

- In Pennsylvania, food & beverage service workers averaged \$7.20 to \$8.80 per hour in 2005. Entry-level rates were between \$5.90 and \$6.40 per hour, while experienced food & beverage service workers earned anywhere from \$7.90 to \$9.90 per hour.
- Earnings can vary greatly, depending on the establishment. The income of these workers is usually based on a combination of wages and customer tips.
- The following table includes the average hourly, entry level, and experienced level wages in 2005 for food & beverage service workers in Pennsylvania.

Occupational Title	Average Hourly Wage	Entry Level Wage	Experienced Level Wage
Bartenders	\$7.44	\$5.91	\$8.20
Combined Food Preparation & Serving Workers	\$7.46	\$5.91	\$8.24
Counter Attendants: Cafeteria, Food Concession & Coffee Shop	\$7.24	\$5.91	\$7.90
Waiters & Waitresses	\$7.25	\$5.91	\$7.93
Food Servers, Non-restaurant	\$8.71	\$6.38	\$9.88
Dining Room & Cafeteria Attendants & Bartender Helpers	\$7.31	\$5.92	\$8.00
Hosts & Hostesses: Restaurant, Lounge & Coffee Shop	\$8.15	\$6.06	\$9.19

### **Training, Other Qualifications and Advancement**

Food & beverage service jobs are entry-level and require no formal education. However, many employers prefer to fill waiter, bartender and host positions with high school graduates. Bartenders must be at least 21 years of age although most employers elect to hire applicants who are 25 or older. For many individuals, these jobs serve as a source of immediate income, rather than a career. Consequently, most food & beverage service workers are young adults who have little or no previous work experience.

Skills are usually acquired through on-the-job training. After observing experienced workers for a period of time, new employees are assigned their own duties. Although on-the-job training is most common, courses in food service are available through some vocational schools, industry associations and large restaurant chains. In fact, most bartenders participate in training programs provided by vocational-technical or bartending schools.

Personal qualities are very important to employers. Because they frequently deal with the public, food & beverage service workers should have a pleasant personality. Individuals must be well spoken and have a neat, clean appearance. A good memory is needed to properly process customer orders. In addition, workers may need basic arithmetic skills to total bills when a calculator or cash register is unavailable.

Because most food-serving establishments are relatively small in size, promotion opportunities are limited. Workers may find jobs in up-scale restaurants where earnings are higher. Others transfer to a different position within the food and beverage service industry. Individuals with enough experience may be promoted to supervisory or management positions. A few open their own business.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of food & beverage service workers include flight attendants, retail salespeople, butlers, and tour bus drivers.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- The National Restaurant Association, 1200 17th St. NW. Washington, DC 20036-3097. Internet: <http://www.restaurant.org>
- International Council on Hotel, Restaurant, and Institutional Education, 2613 North Parham Rd., 2nd Floor, Richmond, VA 23294. Internet: <http://www.chrie.org>



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## Food Service & Lodging Managers

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SOC CODES: 11-9051 and 11-9081

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### Significant Points

- Opportunities will be best for applicants with a college degree in restaurant or hotel management.
- Long hours and irregular work schedules are common.
- About 1 in 3 were self-employed.

### Nature of the Work

- Food service & lodging managers ensure the successful operation of eating, drinking and lodging establishments. In addition to their regular duties, most managers also handle administrative and human resource tasks. They may interview employees, prepare work schedules, and fill in when necessary.
- Specific duties for food service managers include selecting dishes, pricing menu items, and ensuring quality in food service. Assistant managers help to oversee service in the dining room, while executive chefs take responsibility for all kitchen operations.
- To create a pleasant environment, lodging managers provide guests with many of the comforts of home. They may also schedule meeting rooms and electronic equipment for special events.
- Larger organizations usually employ several lodging managers, who specialize in specific areas.

**General managers** have overall responsibility for hotel operations. They may set room rates, allocate funds, approve expenditures, and establish service standards.

**Resident managers** live in hotels and are on-call 24 hours a day to resolve problems or emergencies.

**Executive housekeepers** ensure that guestrooms, meeting rooms, and public areas are clean and well maintained. They also train, schedule, and supervise the cleaning staff.

**Front office managers** coordinate reservations and room assignments. In addition, they train and supervise the hotel's front desk staff.

**Food and beverage managers** direct the food service operations of hotels.

**Convention services managers** coordinate banquet and convention services with representatives of sponsoring groups or organizations.

### Working Conditions

- Food service & lodging managers typically work more than 40 hours per week, including evening and weekend shifts. Institutional food service managers often work more conventional schedules. Resident lodging managers may be on-call to work at any time.
- During peak business periods, managers may experience intense pressure to coordinate a wide range of activities. Additional stress can arise from dealing with irate customers and uncooperative employees.

### Employment

- Food service & lodging managers held about 429,600 jobs in 2004 in the United States and approximately 16,240 jobs in Pennsylvania.
- About 48 percent were employed with eating, drinking and lodging establishments. Another 32 percent were self-employed.

### Job Outlook

- Employment of food service & lodging managers in Pennsylvania is expected to grow from approximately 16,240 in 2004 to approximately 18,340 in 2014. Food service & lodging managers can expect about 210 openings due to growth and about 266 replacement openings for approximately 476 total annual openings.
- Eating and drinking places will provide the most jobs for food service managers. However, a growing elderly population should also increase demand in nursing homes and residential facilities.
- Increasing tourism and business travel will drive the employment growth of lodging managers, especially within suite hotels. This growth will be limited as many front desk clerks assume traditional managerial roles.
- Employment opportunities will be best for applicants with a college degree in restaurant or hotel management.

### Earnings

- Average annual earnings of food service managers were \$47,270 in 2005. The entry-level wage in 2005 was \$27,820 while an experienced food service manager made \$57,000.

- Average annual earnings of lodging managers were \$47,820 in 2005. The entry-level wage in 2005 was \$27,060 while an experienced lodging manager made \$58,200.
- Some managers earn monetary bonuses. Others receive discounts on meals and lodging.

### **Training, Other Qualifications and Advancement**

Most eating, drinking and lodging establishments prefer to hire graduates of formal management training programs. In fact, companies may recruit trainees directly from two-year and four-year training programs. However, many employers also choose to promote experienced workers from within the company, regardless of their educational attainment.

A bachelor's degree provides particularly strong preparation for a career as a food service or lodging manager. Training in restaurant or hotel management is available through many four-year colleges. In addition, two-year programs are available through community colleges, junior colleges, and technical institutes. These programs lead to an associate's degree or formal certification.

Food service & lodging managers must be self-disciplined and detail-oriented. Good health and physical stamina are needed. Leadership, organizational and problem-solving skills are all very important. In addition, aspiring managers should have a basic familiarity with computers. Communication and interpersonal skills are essential. Because they deal with the public, managers need a neat and clean appearance.

Opportunities for advancement are usually best with larger organizations. Employers are likely to promote experienced workers who have proven their abilities and completed some formal education. However, individuals may have to relocate in order to take advantage of promotional opportunities. Others open their own businesses.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of food service & lodging managers include health services administrators, retail store managers, bank managers, apartment building managers and office managers.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- The National Restaurant Association Educational Foundation, 175 W. Jackson Blvd., Suite 1500, Chicago, IL 60604-2702. Internet: <http://www.nraef.org>
- American Hotel and Lodging Association, 1201 New York Ave. NW, Suite 600, Washington, DC 20005-3931. Internet: <http://www.ahma.com/>
- Educational Institute of the American Hotel and Lodging Association, 800 N. Magnolia Ave., Suite 1800, Orlando, FL 32803. Internet: <http://www.ei-ahla.org>
- International Executive Housekeepers Association, Inc., 1001 Eastwind Dr., Suite 301, Westerville, OH 43081-3361. Internet: <http://www.ieha.org>
- The International Council on Hotel, Restaurant, and Institutional Education, 2613 North Parham Rd., 2nd Floor, Richmond, VA 23294. Internet: <http://www.chrie.org>

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## Handlers, Equipment Cleaners, Helpers & Laborers

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SOC CODES: 47-2061, 47-3011, 47-3012, 47-3013, 47-3014, 47-3015, 47-3016, 47-5081, 49-9098, 51-9198, 53-6021, 53-6031, 53-7061, 53-7062, 53-7063, 53-7064 and 53-7081

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### Significant Points

- Most jobs are entry-level and require no formal training.
- Projected employment growth varies by occupation.

### Nature of the Work

- Handlers, equipment cleaners, helpers, and laborers (called general laborers going forward) perform tasks that are needed to make the work of skilled construction, maintenance, and production workers flow smoothly.
- To perform their jobs effectively, general laborers must be familiar with the work of those they are assisting.

*Construction craft laborers* provide much of the physically demanding labor at construction sites. They may prepare sites, dig trenches, mix concrete, or set explosives.

*Freight, stock, and material movers* use forklifts, dollies, carts, and manual power to move materials between storage and production areas.

*Hand packers and packagers* manually pack, package, or wrap a variety of materials. They may inspect items, label cartons, and stack packages.

*Helpers* assist skilled workers. They may fetch tools, hold materials, or clean work areas.

*Machine feeders and offbearers* are responsible for feeding or removing materials from machines.

*Parking lot attendants* assist customers in parking their cars and collect parking fees.

*Refuse and recyclable material collectors* gather trash, garbage, and recyclables from homes and businesses along a regularly scheduled route. They also transport the refuse to the dump, landfill, or recycling center.

*Service station attendants* fill fuel tanks and wash windshields on vehicles. They may perform simple repairs under the direction of a mechanic.

*Vehicle washers and equipment cleaners* use water and various cleaning equipment to maintain machinery, vehicles, storage tanks, pipelines, and similar equipment.

### Working Conditions

- Although work schedules vary with industry, most general laborers work 8-hour shifts. Early morning, evening, and “graveyard” shifts are common.
- General laborers do repetitive, physically demanding work. They may work at great heights or in tight, awkward places. Some laborers work outdoors in all weather conditions.
- These employees wear safety clothing and hard hats to avoid against injury. Because they may be exposed to harmful materials or chemicals, some workers wear protective devices over their eyes, mouth, and ears.

### Employment

- General laborers held about 6.2 million jobs in 2004 in the United States and approximately 253,580 jobs in Pennsylvania.
- Nearly one-quarter worked for manufacturing companies. About 18 percent were employed in the construction industry and roughly 17 percent in service-providing establishments.
- The following table includes the industry groups that employed the most general laborers in 2004 in Pennsylvania.

Industry Group	2004 Employment	Percent
Manufacturing	60,170	23.7%
Construction	44,660	17.6%
Services	41,910	16.5%
Retail Trade	36,600	14.4%
Transportation & Warehousing	27,800	11.0%

### Job Outlook

- Employment of general laborers in Pennsylvania is expected to decrease from approximately 253,580 in 2004 to approximately 252,670 in 2014. About 7,425 annual openings will result from replacement needs. Although no net employment growth is expected for general laborers, growth openings may occur in some specific occupations and certain regions.
- Equipment cleaners, hand packers, parking lot attendants, construction helpers, and refuse material collectors will have the best employment prospects. Service station attendants and machine feeders can expect declines in employment levels.
- Employment growth will be limited by automation, out-sourcing, and job combination. All of these factors increase productivity and improve quality control. As a result, many jobs will be eliminated.

### Earnings

- In Pennsylvania, general laborers averaged \$8.30 to \$15.10 per hour in 2005. Entry-level rates were between \$6.00 and \$9.40 per hour, while experienced laborers earned anywhere from \$9.40 to \$18.00 per hour.
- The following table includes the average hourly, entry level, and experienced level wages in 2005 for general laborers in Pennsylvania.

Occupational Title	Average Hourly Wage	Entry Level Wage	Experienced Level Wage
Construction Laborers	\$15.06	\$9.36	\$17.91
Helpers--Brick, Block & Stonemasons and Tile & Marble Setters	\$13.33	\$9.11	\$15.44
Helpers--Carpenters	\$10.93	\$8.29	\$12.25
Helpers--Electricians	\$12.52	\$8.08	\$14.74
Helpers--Painters, Paperhangers, Plasterers & Stucco Masons	\$11.30	\$7.61	\$13.15
Helpers--Pipelayers, Plumbers, Pipefitters & Steamfitters	\$12.00	\$8.71	\$13.65
Helpers--Roofers	\$10.85	\$7.88	\$12.34
Helpers--Extraction Workers	\$13.02	\$8.59	\$15.23
Helpers--Installation, Maintenance & Repair Workers	\$11.29	\$7.36	\$13.26
Helpers--Production Workers	\$11.40	\$7.74	\$13.23
Parking Lot Attendants	\$8.34	\$6.19	\$9.42
Service Station Attendants	\$8.32	\$6.00	\$9.48
Cleaners of Vehicles & Equipment	\$8.92	\$6.32	\$10.22
Laborers & Freight, Stock & Material Movers, Hand	\$11.61	\$7.65	\$13.59
Machine Feeders & Offbearers	\$12.07	\$8.29	\$13.97
Packers & Packagers, Hand	\$10.10	\$6.99	\$11.65
Refuse & Recyclable Material Collectors	\$13.82	\$8.63	\$16.41

### Training, Other Qualifications and Advancement

Most general laborer positions are entry-level and do not require a high school diploma or any previous experience. However, most employers prefer to hire those who are at least 18 years old and physically able to perform the work. Applicants may have to take a physical exam, pass a drug test, or undergo a background check prior to employment.

Workers must be reliable and hard working. Basic reading and math skills are needed to understand procedure manuals and collect payments from customers. Grocery store baggers, service station workers, and parking lot attendants should be pleasant and courteous when dealing with the public.

Although most general laborers learn their skills through on-the-job training, formal apprenticeship programs are available in construction trades. These programs, which combine on-the-job training with classroom instruction, provide overall preparation. Apprentices are taught how to properly handle all tools and equipment.

Before an apprentice is placed on the job, most union contractors require some hands-on training. Likewise, workers who must handle toxic chemicals or operate dangerous equipment often receive additional training in safety awareness and procedures.

Experienced laborers often become trainees for skilled construction, maintenance, and production positions. In fact, most employers prefer to fill open slots with qualified workers from within the company. Some general laborers are promoted to supervisory positions.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of general laborers include roustabouts, forest workers, logging equipment operators, and groundskeepers.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- International Carwash Association, 401 N. Michigan Ave., Chicago, IL 60611.  
Internet: <http://www.carwashes.com>

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## Hotel Desk Clerks

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SOC CODE: 43-4081

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### Significant Points

- Necessary training usually occurs on-the-job.
- Opportunities will be best for applicants who are willing to work part-time.

### Nature of the Work

- *Hotel desk clerks* register guests as they arrive, assign them rooms, and check them out as they depart. Clerks also answer questions about hotel services, checkout times, and local points of interest.
- Computers are used to keep records of room assignments and other registration information.
- In smaller lodging establishments, hotel desk clerks may be responsible for all front office operations.

### Working Conditions

- Because lodging establishments are open 24-hours a day, hotel desk clerks must work evenings, weekends, and holidays. Work schedules are usually assigned based on seniority. Although many clerks work a 40-hour week, part-time work is also common.
- Hotel desk clerks work in clean, well-lit environments. They spend most of the day on their feet.
- Stress levels may increase when dealing with difficult or angry customers.

### Employment

- Hotel desk clerks held about 195,300 jobs in 2004 in the United States and approximately 5,480 jobs in Pennsylvania.
- Most, 82 percent, were employed with lodging establishments. A few worked for restaurants, amusement parks, recreational camps and RV parks.

### Job Outlook

- Employment of hotel desk clerks in Pennsylvania is expected to grow from approximately 5,480 in 2004 to approximately 5,760 in 2014. Hotel desk clerks can expect about 19 openings due to growth and about 246 replacement openings for approximately 265 total annual openings.
- Employment growth will be favorably affected by an increase in business and leisure travel. The shift away from luxury hotels will also stimulate the demand for hotel desk clerks.
- However, technological advancements and a growing effort to cut labor costs are expected to offset any employment growth. Most job openings will result from an unusually high turnover rate.
- Opportunities will be best for applicants who are willing to work on a part-time basis.
- The employment level of hotel desk clerks is sensitive to economic and seasonal fluctuations. During recessions and slow travel periods, fewer opportunities will exist for desk clerks.

### Earnings

Average annual earnings of hotel, motel & resort desk clerks were \$18,620 in 2005. The entry-level wage in 2005 was \$14,510 while an experienced clerk made \$20,670.

### Training, Other Qualifications and Advancement

Although hiring requirements for hotel desk clerks may vary by organization, most employers prefer to hire applicants with a high school diploma or equivalent. Any necessary training usually occurs on-the-job. Supervisors and experienced clerks teach new employees how to perform basic tasks. Additional training may be required to learn how to operate the computerized registration, room assignment, and billing equipment.

Because hotel desk clerks deal with the public, they must have a professional appearance, pleasant personality, and clear speaking voice. Interpersonal and computer skills are very important. Fluency in a foreign language can also be beneficial.

Hotel desk clerks may advance to positions with added responsibilities or supervisory duties. When filling administrative support positions, many organizations prefer to promote qualified individuals from within the company. Advancement opportunities are improved for those desk clerks who have obtained additional skills or training. Formal courses in lodging management are available through the American Hotel and Lodging Educational Institute.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of hotel desk clerks include dispatchers, security guards, bank tellers, telephone operators, records processing clerks, counter clerks, rental clerks, survey workers, and lobby attendants.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- American Hotel and Lodging Association, 1201 New York Ave. NW, Suite 600, Washington, DC 20005-3931. Internet: <http://www.ahma.com/>
- Educational Institute of the American Hotel and Lodging, 800 N. Magnolia Ave., Suite 1800, Orlando, FL 32803. Internet: <http://www.ei-ahla.org>

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## Insurance Sales Agents

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SOC CODE: 41-3021

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### Significant Points

- Despite limited employment growth, job opportunities should be good for qualified applicants.
- Most entry-level workers transfer from other occupations.

### Nature of the Work

- Insurance sales agents help individuals, families, and businesses select insurance policies that provide the best protection for their lives, health, and property. Agents prepare reports, maintain records, and help policyholders settle insurance claims.

*Insurance sales agents* usually work for one insurance company. Some are “independent agents” who sell for several different companies.

*Insurance brokers* represent several companies. They place client policies with the company that offers the best rate and coverage.

- Besides selling multiple types of insurance, many agents offer comprehensive financial planning services.
- Technological advancements have increased the efficiency of insurance sales agents. Therefore, agents have the ability to take on more business.
- Because many new accounts are obtained through referrals, it is important that insurance sales agents maintain regular contact with their clients.

### Working Conditions

- Insurance sales agents usually determine their own work schedules. Most agents work 40 hours or more per week, including evenings and weekends.
- Much of an agent’s work is performed in small offices. Local travel may be required to visit clients, close sales, and investigate claims.

### Employment

- Insurance sales agents held about 399,700 jobs in 2004 in the United States and approximately 18,400 jobs in Pennsylvania.
- Over three-fourths worked for insurance agencies and carriers. About 18 percent were self-employed.
- The following table includes the industries that employed the most insurance sales agents in 2004 in Pennsylvania.

Industry	2004 Employment	Percent
Insurance Agencies, Brokerages & Support	7,830	42.6%
Insurance Carriers	6,850	37.3%
Self-Employed	3,270	17.8%

### Job Outlook

- Employment of insurance sales agents in Pennsylvania is expected to grow from approximately 18,400 in 2004 to approximately 18,910 in 2014. Insurance sales agents can expect about 51 openings due to growth and about 440 replacement openings for approximately 491 total annual openings.
- A growing population will increase the demand for insurance. However, increased worker productivity resulting from new technology will offset any employment growth. In addition, the sale of insurance products over the Internet is expected to continue.
- Opportunities will be best for individuals who sell multiple types of insurance, incorporate new technology in their existing business, and are knowledgeable about their products.
- Over the next ten years, many banks will begin selling insurance directly to the customer. Because bank employees will take over selling responsibilities, fewer insurance agents will be needed.



### **Earnings**

- Average annual earnings of insurance sales agents were \$54,370 in 2005. The entry-level wage in 2005 was \$25,210 while an experienced insurance sales agent made \$68,950.
- Some insurance sales agents receive a straight salary while others are paid solely on commissions, a percentage of their total sales. However, most firms use a combination of salary and commissions. Other employers offer bonuses to those who exceed company quotas.
- Company-paid benefits usually include paid licensing training, group insurance plans, transportation expenses, retirement plans and office space. Independent agents receive few, if any, benefits.

### **Training, Other Qualifications and Advancement**

When hiring entry-level insurance sales agents, many employers seek college graduates who have majored in business or economics. A few companies choose to hire high school graduates with proven sales abilities. In fact, most entry-level agents transfer from other occupations. As a result, these workers tend to be older than the entry-level workers in other fields.

Although not always required, college training can help agents and brokers grasp the technical aspects of insurance policies. It can also provide fundamental procedures for selling insurance. Even though few colleges and universities offer a bachelor's degree program in insurance, many schools do offer some courses in insurance.

Before selling insurance, individuals must obtain a license from the state. Qualified applicants who pass the written examination are issued a license. Separate licenses are required for each type of insurance the agent plans to sell. In addition to licensure, many agents and brokers obtain voluntary certification from a professional organization. This designation assures clients and employers that an individual has a thorough understanding of a particular insurance specialty. In order to retain their certification, insurance agents and brokers must complete a certain amount of continuing education.

Aspiring insurance sales agents should be enthusiastic, confident, and hard working individuals. Because they often work without direct supervision, agents and brokers must be able to manage their time and have the initiative to locate new clients. Communication and problem-solving skills are essential. A familiarity with computers and popular software packages has become very important.

Experienced insurance sales agents may be promoted to sales manager positions. A few advance to agency superintendent or executive positions. Others open their own agencies or firms.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of insurance sales agents include real estate agents, real estate brokers, securities sales representatives, financial services sales representatives, financial advisors, estate planning specialists, and manufacturers' sales representatives.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- National Association of Insurance and Financial Advisors, 2901 Telestar Ct., PO Box 12012, Falls Church, VA 22042-1205. Internet: <http://www.naifa.org>
- Independent Insurance Agents of America, 127 S. Peyton St., Alexandria, VA 22314. Internet: <http://www.iaaa.org>
- National Association of Health Underwriters, 2000 N. 14th St., Ste. 450, Arlington, VA 22201. Internet: <http://www.nahu.org>
- The National Alliance for Insurance Education and Research, PO Box 27027, Austin, TX 78755-2027. Internet: <http://www.scic.com>
- Insurance Vocational Education Student Training (InVEST), 127 S. Peyton St., Alexandria, VA 22314. Internet: <http://www.investprogram.org>
- Insurance Information Institute, 110 William St., New York, NY 10038. Internet: <http://www.iii.org>
- The American Institute for Chartered Property and Casualty Underwriters/Insurance Institute of America, 720 Providence Rd., P.O. Box 3016, Malvern, PA 19355-0716. Internet: <http://www.aicpcu.org>

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## Janitors & Cleaning Supervisors

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SOC CODES: 37-1011, 37-2011 and 37-2012

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### Significant Points

- Janitorial positions are entry-level and require no formal education
- Employment growth will be strongest in companies that provide janitorial services on a contract basis.
- Voluntary certification is available for cleaning supervisors.

### Nature of the Work

- **Janitors**, otherwise known as custodians, housekeepers or maids, keep buildings clean and in good operating condition. In addition to general cleaning, these workers may fix leaky faucets, replenish bathroom supplies, or perform groundskeeping work.
- **Cleaning supervisors** coordinate, schedule and supervise the activities of janitors and cleaners. They also train employees and prepare written reports. Some still perform cleaning duties.
- When cleaning a building, janitors use a wide variety of equipment, tools and cleaning materials. Improved products have made janitorial tasks easier and less time-consuming.

### Working Conditions

- Most janitors & cleaning supervisors work a 40-hour week although there are plenty of part-time opportunities. Evening and weekend work is common because many buildings are cleaned after normal working hours.
- Work is usually performed inside heated, well-lit buildings. Outdoor work may be required to sweep walkways, shovel snow, or mow lawns. Regardless of the location, janitors spend a great deal of time on their feet, sometimes lifting furniture or pushing heavy equipment.
- Some tasks can be dirty and unpleasant. In addition, certain cleaning machines are noisy.
- To reduce the risk of injury, janitors must be careful when operating machinery and handling chemicals.

### Employment

- Janitors & cleaning supervisors held about 4.0 million jobs in 2004 in the United States and approximately 153,150 jobs in Pennsylvania.
- Over 23 percent worked for firms that provide janitorial and cleaning services to buildings. Others were employed with educational institutions, lodging establishments and religious organizations.
- The following table includes the industries that employed the most janitors & cleaning supervisors in 2004 in Pennsylvania.

Industry	2004 Employment	Percent
Services to Buildings & Dwellings	35,660	23.3%
Elementary & Secondary Schools	19,450	12.7%
Traveler Accommodation	11,210	7.3%
Colleges & Universities	9,140	6.0%
Religious Organizations	8,480	5.5%
General Medical & Surgical Hospitals	7,820	5.1%

### Job Outlook

- Employment of janitors & cleaning supervisors in Pennsylvania is expected to grow from approximately 153,150 in 2004 to approximately 170,690 in 2014. Janitors and cleaning supervisors can expect about 1,754 openings due to growth and about 3,018 replacement openings for approximately 4,772 total annual openings.
- In an effort to reduce costs, many companies will outsource their janitorial needs. As a result, employment growth will occur in companies that provide these services on a contract basis.
- To clean the increasing number of buildings, workers are assigned to cleaning teams and supplied with more efficient equipment and cleaning materials.

### Earnings

- In Pennsylvania, janitors & cleaning supervisors averaged \$8.60 to \$17.00 per hour in 2005. Entry-level rates were between \$6.70 and \$10.80 per hour, while experienced janitors & cleaning supervisors earned anywhere from \$9.60 to \$20.10 per hour.
- The following table includes the average hourly, entry level, and experienced level wages in 2005 for janitors & cleaning supervisors in Pennsylvania.

Occupational Title	Average Hourly Wage	Entry Level Wage	Experienced Level Wage
Supervisors of Housekeeping & Janitorial Workers	\$16.93	\$10.71	\$20.04
Janitors & Cleaners	\$10.20	\$6.90	\$11.86
Maids & Housekeeping Cleaners	\$8.65	\$6.75	\$9.60

### Training, Other Qualifications and Advancement

Janitorial positions are entry-level and require no formal education. In fact, most skills are learned through on-the-job training. Experienced workers teach newly hired janitors how to perform routine cleaning duties. Once enough experience has been gained, entry-level janitors are assigned to more complicated tasks.

Work is usually found by answering newspaper advertisements, applying directly to organizations, contacting local labor unions, or visiting state employment offices. To fill open positions, employers look for dependable, hard-working people who are able to follow instructions. Basic arithmetic and communication skills are important. High school shop courses may also be beneficial.

The International Executive Housekeepers Association (IHEA) offers two voluntary certification programs for cleaning supervisors. Applicants with a high school education may obtain the Certified Executive Housekeeper (CEH) designation. Meanwhile, the Registered Executive Housekeeper (REH) certification is offered to those with a four-year college degree. Both designations are earned by taking courses and passing examinations. Certification must be renewed every two years to ensure that supervisors are aware of new cleaning methods.

Advancement opportunities for janitorial workers are usually limited. In larger organizations, they may be promoted to supervisory positions. Cleaning supervisors can then advance up the company ladder and become managers. To enhance their supervisory skills, many workers attend in-service training. Eventually, some janitorial workers open their own cleaning business.

### Related Occupations

Workers in other occupations with responsibilities and duties related to those of janitors & cleaning supervisors include refuse collectors, floor waxers, street sweepers, window cleaners, gardeners, boiler tenders, pest controllers, general maintenance repairers and private household workers.

### Sources of Additional Information

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- International Executive Housekeepers Association, 1001 Eastwind Dr., Suite 301, Westerville, OH 43081-3361. Internet: <http://www.ieha.org>

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## Jewelers

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SOC CODE: 51-9071

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### Significant Points

- Opportunities will be best for those with formal training.
- Computer-aided design is increasingly used in the jewelry field.

### Nature of the Work

- *Jewelers* design, manufacture, adjust and repair jewelry. Most specialize in one or more area, including design, gem cutting, stone setting or repair.
- Those who are knowledgeable about the quality, characteristics and values of gemstones may sell jewelry and provide appraisal services.
- In manufacturing, jewelers usually specialize in a single operation. Some focus on jewelry models while others concentrate on finishing work. Lasers are used to perform delicate stone cutting and inscription work.
- Many jewelers use computers to design custom pieces of jewelry.

### Working Conditions

- In repair shops, jewelers usually work alone and have little supervision. On the other hand, those employed in retail stores spend a great deal of time with the public.
- The desire to provide timely delivery of quality jewelry can cause fatigue and stress. The use of ergonomically correct benches has helped ease the discomfort caused by spending long periods of time in one position.
- Safety precautions must be taken to avoid injuries from jeweler chemicals, tools, and torches.
- Because of the value of jeweler materials, strict security measures must be observed. Locked doors, burglar alarms, and armed guards are common.

### Employment

- Jewelers held about 42,500 jobs in 2004 in the United States and approximately 890 jobs in Pennsylvania.
- About 28 percent worked for jewelry stores. A similar number were self-employed.
- The following table includes the industries that employed the most jewelers in 2004 in Pennsylvania.

Industry	2004 Employment	Percent
Self-Employed	250	28.0%
Jewelry, Luggage & Leather Goods Stores	250	27.9%
Other Miscellaneous Manufacturing	190	21.2%

### Job Outlook

- Employment of jewelers in Pennsylvania is expected to grow from approximately 890 in 2004 to approximately 920 in 2014. Jewelers can expect about 3 openings due to growth and about 18 replacement openings for approximately 21 total annual openings.
- The demand for jewelry depends on the amount of disposable income people have. Therefore, increased income levels are expected to keep jewelry sales strong. Demand for repair workers will also be strong because maintenance and repair work is an ongoing process.
- Opportunities in retail stores and repair shops will be best for graduates of a formal training program.
- Automation within the manufacturing industry is likely to affect lower-skilled occupations, such as polisher and assembler. However, more creative positions are less likely to be affected.

### Earnings

No Pennsylvania-specific information was available for jewelers. However, the average salary nationwide for jewelers and precious stone and metal workers in 2005 was \$32,830.

### **Training, Other Qualifications and Advancement**

Most jewelers learn their skills through vocational-technical schools, correspondence courses or on-the-job training. Some colleges and design schools offer programs that lead to a degree in fine arts. Completion of a formal program can enhance one's employment and advancement opportunities.

Training programs, which last six to 12 months, are available for those individuals interested in working in jewelry stores or repair shops. The Gemological Institute of America (GIA) also offers structured diploma programs and self-paced correspondence courses. These programs teach students how to use and care for jewelers' tools as well as basic jewelry making and repairing skills. Regardless of where training is obtained, it is highly recommended that any aspiring jeweler become familiar with computer-aided design, which is increasingly used in the jewelry field.

Workers in manufacturing plants traditionally develop their skills through apprenticeships and on-the-job training programs, which last three to four years. Recently technical schools and colleges have started to offer training programs that are tailored to jewelers working in manufacturing. Employers prefer to hire program graduates because they are familiar with the production process and require little additional training.

The precise and delicate nature of jeweler work requires manual dexterity, hand-eye coordination and patience. Artistic ability and fashion consciousness are major assets. Jewelers must be trustworthy and of good character. Those employed in retail stores should be neat and personable.

Advancement opportunities are limited and greatly dependent on an individual's skill and initiative. For most jewelers, advancement takes the form of higher pay. However, some do become master jewelers, head jewelers, supervisors or store managers. Others open their own business.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of jewelers include polishers, dental laboratory technicians, precision instrument and equipment repairers, hand engravers, and watchmakers.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- Manufacturing Jewelers and Suppliers of America, 45 Royal Little Dr., Providence, RI 02904. Internet: <http://mjsa.polygon.net>
- Accrediting Commission of Career Schools and Colleges of Technology, 2101 Wilson Blvd., Suite 302, Arlington, VA 22201. Internet: <http://www.accsct.org>

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## Public Relations Specialists

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SOC CODE: 27-3031

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### Significant Points

- Job opportunities should be best for those who combine a college degree with related work experience.
- Keen competition is expected for entry-level jobs.
- Valuable experience can be obtained through a college internship or the Armed Forces.

### Nature of the Work

- *Public relations specialists* inform the general public, special interest groups, and stockholders of an organization's policies, activities, and accomplishments. They also keep management aware of the public's attitudes and concerns.
- In government, these workers keep the public informed about the activities of government agencies and officials. They are often called press secretaries, information officers, or public affairs specialists.
- Those who handle publicity for an individual or a small organization may deal with all aspects of the job, including marketing and sales.

### Working Conditions

- Most public relations specialists work 35 to 40 hours per week. However, unpaid overtime and out of town travel are common.
- Public relations offices are busy places. Work schedules are frequently rearranged to meet deadlines, attend meetings and deliver speeches.

### Employment

- Public relations specialists held about 187,600 jobs in 2004 in the United States and approximately 4,350 jobs in Pennsylvania.
- About 15 percent worked for management companies. Another 8 percent were employed with advertising agencies. Others worked for educational institutions and religious organizations.
- The following table includes the industries that employed the most public relations specialists in 2004 in Pennsylvania.

Industry	2004 Employment	Percent
Management of Companies & Enterprises	660	15.1%
Advertising & Related Services	350	8.1%
Colleges & Universities	330	7.5%
Religious Organizations	320	7.4%

### Job Outlook

- Employment of public relations specialists in Pennsylvania is expected to grow from approximately 4,350 in 2004 to approximately 4,860 in 2014. Public relations specialists can expect about 51 openings due to growth and about 63 replacement openings for approximately 114 total annual openings.
- An increasingly competitive business environment should spur demand in organizations of all sizes.
- Employment growth will be strongest in public relations firms, which provide consultants to companies that elect to contract out for their public relations services.
- Competition will be keen as the number of qualified applicants continues to exceed the number of job openings.
- Opportunities should be best for those individuals who combine a college degree with related work experience.

### Earnings

Average annual earnings of public relations specialists in Pennsylvania were \$54,150 in 2005. The entry-level wage in 2005 was \$27,450 while an experienced public relations specialist made \$67,500.

### **Training, Other Qualifications and Advancement**

Although there are no defined standards for entry into a public relations career, most employers prefer applicants who have some practical experience as well as a college degree in public relations, journalism, advertising or communications. Others seek public relations specialists with demonstrated skills or training in a field related to the firm's business, such as engineering or finance.

Valuable experience can be obtained through a college internship or the Armed Forces. Membership in a local organization also provides an opportunity for potential public relations specialists to make professional contacts. Ultimately, a student's largest asset when looking for a job is his or her portfolio of work. This portfolio includes examples of published articles, slide presentations, and other related work. Writing for a school publication, television program or radio station provides valuable experience and material for one's portfolio.

Within larger organizations, newly hired employees generally attend classroom-training programs. In smaller companies, new employees work under the guidance of experienced staff members. Entry-level duties may include maintaining files, assembling information, answering calls, preparing press conferences and escorting visitors. After gaining sufficient experience, specialists may begin writing news releases and speeches. They also begin to design and carry out public relations programs. Specialists employed with smaller firms usually get all-around experience, while those in larger firms tend to be more specialized.

Aspiring public relations specialists need self-confidence, an outgoing personality and an enthusiasm for motivating people. Creativity, initiative and good judgment are important character traits. Communication, decision-making and problem-solving skills are also essential. In addition, public relations specialists must be able to function as part of a team.

Entry-level public relations specialists are hired as research or account assistants. With experience, they may be promoted to account supervisor positions. After demonstrating that they can handle the additional responsibilities, some individuals advance to account executive, vice president, or senior vice president positions. A few even start their own consulting firms.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of public relations specialists include fundraisers, lobbyists, sales representatives, advertising managers, marketing managers, sales managers and promotion managers.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- Public Relations Society of America, 33 Irving Place, New York, NY 10003-2376. Internet: <http://www.prsa.org>
- International Association of Business Communicators, One Hallidie Plaza, Suite 600, San Francisco, CA 94102-2818. Internet: <http://www.iabc.com>

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## Purchasing Managers, Buyers & Purchasing Agents

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SOC CODES: 11-3061, 13-1021, 13-1022 and 13-1023

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### Significant Points

- Opportunities will be best for those with a bachelor's degree in business and some industry experience.
- Increased use of computers has streamlined processes and reduced the demand for lower-level buyers.
- Trade and manufacturing industries employ over 50 percent.

### Nature of the Work

- **Purchasing managers, buyers & purchasing agents** (referred to going forward as *purchasing professionals*) seek to obtain the highest quality merchandise at the lowest possible purchase cost. They may choose suppliers, negotiate price and award contracts.
- In general, *purchasers* buy goods and services for their organization and *buyers* purchase items for resale.
- In large organizations, purchasing agents and buyers focus on routine tasks, while purchasing managers handle more complex or critical purchases and often supervise a group of purchasing agents.
- Purchasing professionals work closely with other employees when deciding on purchases, an arrangement sometimes called team buying. They may assist in planning sales promotion programs and ad campaigns.
- Wholesale buyers purchase goods directly from manufacturers or other wholesale firms for resale to retail firms, commercial establishments, and institutions. Retail buyers purchase goods for resale to the public.
- Computers handle the more routine tasks such as obtaining product and price listings, tracking inventory, producing sales reports, and processing orders. This enables purchasing professionals to concentrate on the analytical aspects of the job.

### Working Conditions

- Most purchasing professionals work in comfortable, well-lit offices.
- Overtime, evening and weekend work is common during special sales, conferences and production deadlines. For those working in retail trade, this is especially true for the holiday seasons.
- Workers are expected to perform under great pressure and need great physical stamina to keep up with the fast-paced nature of their work.
- Many purchasing professionals travel several days a month. Some may even travel outside the United States.

### Employment

- Purchasing professionals held about 520,200 jobs in 2004 in the United States and approximately 21,990 jobs in Pennsylvania.
- Although they can be found in almost all industries, the largest concentration of purchasing professionals work in wholesale & retail trade establishments. Others were employed with manufacturing companies and service-providing firms.
- The following table includes the industry groups that employed the most purchasing professionals in 2004 in Pennsylvania.

Industry Group	2004 Employment	Percent
Wholesale & Retail Trade	6,000	27.3%
Manufacturing	5,730	26.1%
Services	5,340	24.3%
Government	2,330	10.6%

### Job Outlook

- Employment of purchasing professionals in Pennsylvania is expected to grow from approximately 21,990 in 2004 to approximately 22,690 in 2014. Purchasing professionals can expect about 70 openings due to growth and about 546 replacement openings for approximately 616 total annual openings.



- Mergers and acquisitions have forced centralizing and consolidation of buying departments in many organizations. As a result, many purchasing jobs have been eliminated.
- Purchasing agents and buyers with a bachelor's degree in business, and some industry experience, will have the best chance of obtaining a job. A master's degree in business or public administration is generally needed for higher level purchasing positions.

### Earnings

- In Pennsylvania, purchasing professionals averaged \$45,200 to \$76,400 annually in 2005. Entry-level purchasing professionals earned between \$20,200 and \$44,700, while experienced purchasing professionals were paid anywhere from \$57,600 to \$92,300.
- The following table includes the average hourly, entry level, and experienced level wages in 2005 for purchasing professionals in Pennsylvania.

Occupational Title	Average Hourly Wage	Entry Level Wage	Experienced Level Wage
Purchasing Managers	\$76,380	\$44,670	\$92,240
Purchasing Agents & Buyers, Farm Products	\$45,220	\$20,270	\$57,690
Wholesale & Retail Buyers	\$50,350	\$28,020	\$61,520
Purchasing Agents, Other	\$52,730	\$33,650	\$62,270

- Purchasing professionals often receive a standard benefits package that includes vacations, sick leave, insurance and pension plans. In addition to standard benefits, retail buyers often receive discounts on merchandise and may earn cash bonuses based on their performance.

### Training, Other Qualifications and Advancement

Purchasing professionals usually begin as trainees, purchasing clerks, expeditors or as junior/assistant buyers. Wholesale and retail firms prefer to hire applicants who are familiar with the merchandise they will be selling. Some firms promote qualified employees; others recruit and train college graduates. Most employers use a combination of these methods.

Educational requirements tend to vary with the size of the organization. Trade organizations prefer applicants with a bachelor's degree in business while manufacturing firms prefer applicants with a degree in business, economics, engineering, or science. Regardless of academic preparation, new employees must learn the specifics of their employers' business. This training period varies in length, with most lasting one to five years.

Purchasing professionals must be computer literate, including knowledge of word processing and spreadsheet software. Aspiring purchasing professionals should possess strong planning, decision-making and marketing skills. They should also have an interest in merchandising. Experienced purchasing agents or buyers may advance to purchasing manager, supply manager, or director of materials management. Regardless of industry, continuing education is essential for advancement.

Although no national standard exists, professional certification is becoming important. In *private industry*, recognized marks of professional competence include Accredited Purchasing Practitioner (A.P.P.) and Certified Purchasing Manager (C.P.M.). These certifications are both conferred by the National Association of Purchasing Management. Meanwhile, the American Purchasing Society confers certification as a Certified Purchasing Professional (C.P.P.). In *government*, indicators of professional competence include Certified Professional Public Buyer (C.P.P.B.) and Certified Public Purchasing Officer (C.P.P.O.), conferred by the National Institute of Governmental Purchasing. Most of these are awarded only after work-related experience and education requirements are met, and exams are successfully completed.

### Related Occupations

Workers in other occupations with responsibilities and duties related to those of purchasing professionals include advertising managers, marketing managers, public relations managers, insurance sales agents, retail salespersons, sales representatives, sales engineers and sales managers.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- American Purchasing Society, North Island Center, Suite 203, 8 E Galena Blvd., Aurora, IL 60505-3314.  
Internet: <http://www.american-purchasing.com>
- Institute for Supply Management, P.O. Box 22160, Tempe, AZ 85285-2160.  
Internet: <http://www.napm.org>
- National Institute of Governmental Purchasing, Inc., 151 Spring St., Suite 300, Herndon, VA 20170-5223.  
Internet: <http://www.nigp.org>

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## Real Estate Agents & Brokers

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SOC CODES: 41-9021 and 41-9022

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### Significant Points

- Licensing is required to work in the state of Pennsylvania.
- Most employers prefer to hire applicants who have a college degree in real estate.
- About 1 in 2 were self-employed.

### Nature of the Work

- **Real estate agents & brokers** use their knowledge to help people buy and sell real estate. They are also familiar with local zoning and tax laws.  
*Agents* are independent sales workers who contract their services to a licensed broker.  
*Brokers* sell real estate owned by others. They may also rent and manage properties for a fee.
- Most agents & brokers sell residential properties. A small number are responsible for commercial, industrial and other types of real estate.
- Before showing any properties, agents & brokers meet with potential buyers to establish what type of property the client is looking for. Computers are often used to give the buyers a virtual tour of any buildings they are interested in.
- Once the contract has been signed, real estate agents & brokers ensure that all special terms are met by the closing date.

### Working Conditions

- Real estate agents & brokers usually determine their own work schedules. Many work more than 40 hours per week, including evenings and weekends.
- Business is usually slower during the winter season.
- Technological advancements allow agents & brokers to work out of their homes instead of offices. Still, much of their time is spent away from their desks - showing properties, meeting with prospective clients and researching the condition of the real estate market.

### Employment

- Real estate agents & brokers held about 459,900 jobs in 2004 in the United States and approximately 8,010 jobs in Pennsylvania.
- Over 50 percent were self-employed. Another 37 percent worked for real estate agencies and companies involved in the operation of buildings.
- The following table includes the industries that employed the most real estate agents & brokers in 2004 in Pennsylvania.

Industry	2004 Employment	Percent
Self-Employed	4,030	50.3%
Offices of Real Estate Agents & Brokers	1,580	19.8%
Lessors of Real Estate	760	9.5%
Activities Related to Real Estate	600	7.5%

### Job Outlook

- Employment of real estate agents & brokers in Pennsylvania is expected to grow from approximately 8,010 in 2004 to approximately 8,640 in 2014. Real estate agents & brokers can expect about 63 openings due to growth and about 159 replacement openings for approximately 222 total annual openings.
- Growth will stem primarily from the increased demand for home purchases and rental units.
- Technological advancements have increased the productivity of real estate agents & brokers. This may result in the elimination of some marginal agents, such as those practicing part-time.

- The Internet allows clients to conduct their own property searches. However, agents & brokers will still be needed to show properties and close deals.
- Employment levels of real estate agents & brokers are sensitive to changes in the economy. During periods of declining economic activity and tight credit, the volume of property sales decreases. As a result, agents & brokers may experience reduced earnings, decreased work hours, and even job loss.

### **Earnings**

- Average annual earnings of real estate brokers were \$72,160 in 2005. The entry-level wage in 2005 was \$35,460 while an experienced real estate broker made \$90,150.
- Average annual earnings of real estate agents were \$46,660 in 2005. The entry-level wage in 2005 was \$26,490 while an experienced real estate agent made \$56,750.
- Real estate agents & brokers earn most of their money from commissions. The commission rate varies and may be divided among several workers.
- Earnings may be irregular at first. Some new agents go several weeks or months before making a sale.

### **Training, Other Qualifications and Advancement**

Real estate sales agents & brokers must be licensed to work in the state of Pennsylvania. Licensure applicants must be high school graduates who are at least 18 years of age. At least 30 hours of additional classroom instruction should be completed. To obtain a broker's license, applicants need several years of practical experience as well. This requirement may be waived for those with a bachelor's degree in real estate. Qualified applicants who pass the written examination are awarded a license, which must be renewed every few years. Although they are not required to re-take the examination, agents and brokers are required to complete some continuing education to maintain their license.

Because real estate transactions have become more legally complex, many employers prefer to hire college graduates. Educational programs in real estate are offered at many junior colleges and four-year schools. Still, many firms continue to offer on-the-job training programs to their employees. Experienced workers teach newly hired personnel the practical aspects of the job, including how to use the computer to locate available properties and identify financing sources. In time, entry-level agents and brokers are given additional responsibilities and left to perform more work independently.

To many employers, personality traits are just as important as academic background. Maturity, tact and honesty are essential qualities for aspiring real estate agents and brokers. Many companies look for enthusiastic people who are organized and detail-oriented. Because they work with the public, real estate agents & brokers should also possess a pleasant personality and neat appearance.

Advancement opportunities usually take the form of higher commission rates. In larger firms, experienced agents may be promoted to sales or general manager positions. With additional training, some agents & brokers become appraisers or property managers. Others go into mortgage financing or real estate investment counseling. Experienced brokers may decide to open their own office.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of real estate agents & brokers include automobile salesmen, retail salespersons, securities sales representatives, financial services sales representatives, insurance sales agents, and sales representatives.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- National Association of Realtors. 430 North Michigan Avenue, Chicago, IL 60611-4087.  
Internet: <http://www.realtor.org>

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## Retail Sales Worker Supervisors

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SOC CODES: 41-1011

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### Significant Points

- Opportunities will be best for those with previous retail experience.
- Long, irregular work schedules are common.
- A postsecondary degree may increase advancement options with certain employers.

### Nature of the Work

- **Retail sales worker supervisors** oversee the work of retail salespersons, cashiers, customer service representatives, stock clerks and grocery clerks. They may also be responsible for interviewing applicants, training employees, preparing work schedules and ensuring customer satisfaction.
- The responsibilities of retail sales worker supervisors vary by size and type of establishment. Larger organizations tend to have more levels of management than smaller stores.
- Supervisory-level retail managers, often referred to as **department managers**, provide day-to-day oversight of individual departments within large retail stores. They establish policies, implement procedures, coordinate sales promotions, review sales records and promote good public relations.
- In small stores, supervisors are often called **store managers**. They not only supervise salespersons, but also are responsible for the operation of the entire store.

### Working Conditions

- Most retail sales worker supervisors have offices within the stores, but a large portion of their workday is spent on the sales floor.
- Hours can change weekly but most retail supervisors work at least 40 hours per week. Evening and weekend work is expected but supervisors are usually compensated with a weekday off. Sometimes, they must report to work on short notice when other employees are absent.
- Longer work hours can be expected during sales, holidays, busy shopping hours, and when inventory is taken.
- Independent owners can often set their own schedules, but hours must be convenient to customers.

### Employment

- Retail sales worker supervisors held 1.7 million jobs in 2004 in the United States and approximately 66,270 jobs in Pennsylvania.
- Over 60 percent worked for retail trade establishments – primarily in grocery, clothing, department and drug stores. About 1 in 4 were self-employed, mainly as small storeowners.
- The following table includes the industries that employed the most retail supervisors in 2004 in Pennsylvania.

Industry	2004 Employment	Percent
Self-Employed	16,460	24.8%
Grocery Stores	5,430	8.2%
Clothing Stores	5,150	7.8%
Department Stores	3,510	5.3%

### Job Outlook

- Employment of retail sales worker supervisors in Pennsylvania is expected to shrink from approximately 66,270 in 2004 to approximately 65,800 in 2014. About 1,191 annual openings will result from replacement needs. Although no net employment growth is expected statewide, growth openings may occur in some areas.
- Keen competition is expected for those jobs with the most attractive earnings and working conditions. Candidates with previous retail experience will have the best opportunities.
- Growth in this occupation will be restrained as retail companies bypass the department-level manager. However, many job openings are expected to occur as experienced supervisors and managers move into higher levels of management, transfer to other occupations, or leave the labor force.

- The number of self-employed retail sales worker supervisors is expected to decline as independent retailers face increasing competition from national chains.
- Unlike other levels of management, restructuring and consolidation at the corporate level does not generally affect store-level supervisors.

### **Earnings**

- Average annual earnings of retail sales worker supervisors in Pennsylvania were \$39,000 in 2005. The entry-level wage in 2005 was \$23,010 while an experienced retail sales worker supervisor made \$47,000.
- Retail sales worker supervisors often receive a commission in addition to their salary. Their commission is usually a percentage of department or store sales. This offers an opportunity to significantly increase one's earnings. Managers who sell large amounts of merchandise often receive other bonuses or awards as well.
- Supervisors receive typical benefits and may even receive stock options. In addition, they often receive a discount on their store's merchandise.

### **Training, Other Qualifications, and Advancement**

The educational background of retail sales worker supervisors varies widely. Many acquire knowledge of merchandising, customer service and the basic policies and procedures of the store through experience gained on the sales floor as salespersons, cashiers or customer service workers.

Those with postsecondary education usually hold a degree in liberal arts, social science, business or management. Regardless of the education received, courses in accounting, administration, marketing, management, sales, psychology, sociology and communication are helpful. Many students participate in internship programs or enter a management trainee program directly after graduation.

Once on the job, the type and amount of training varies from store to store. Many national chains have formal training programs that last anywhere from one week to one year. These programs usually include classroom and in-store training. Classroom training often includes topics such as interviewing, customer service skills, inventory management and scheduling. The in-store part of their training places management trainees in one department or in a rotation through several departments to gain a well-rounded knowledge of the store's operation. Many organizations require that their trainees gain experience during all shopping seasons.

Retail sales worker supervisors must be computer literate in order to handle computerized cash registers and inventory control systems. The ability to motivate workers, communicate clearly with customers, and get along with all types of people are essential qualities for retail supervisors and managers.

Many retail sales worker supervisors are promoted from within the company. Individuals who display leadership qualities can become candidates for promotion to assistant store manager or store manager. A postsecondary degree may speed this advancement, because employers view it as a sign of motivation and maturity. In smaller establishments, advancement may come slowly. Many larger establishments have extensive career ladder programs. However, aspiring supervisors may have to relocate to another store or to the central office in order to advance. Individuals can become buyers, purchasing agents or purchasing managers. Others go into advertising, marketing or public relations. Experienced workers may elect to open their own store. However, retail trade is highly competitive, and although many independent retail owners succeed, some fail to cover expenses and eventually go out of business.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of retail sales worker supervisors include managers in restaurants, wholesale trade, hotels, banks, and hospitals.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- National Retail Federation, 325 7th St. NW, Suite 1100, Washington, DC 20004. Internet: <http://www.nrf.com>
- Food Marketing Institute, 655 15<sup>th</sup> St. NW, Washington, DC 20005. Internet: <http://www.fmi.org>
- National Automobile Dealers Association, Public Relations Dept., 8400 Westpark Dr., McLean, VA 22102-3591. Internet: <http://www.nada.org>
- National Association of Convenience Stores, 1600 Duke St., Alexandria, VA 22314-3436. Internet: <http://www.cstorecentral.com>

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## Retail Salespersons

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SOC CODE: 41-2031

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### Significant Points

- Part-time employment opportunities are plentiful.
- Employers look for high school graduates to fill positions.

### Nature of the Work

- **Retail salespersons** assist customers in finding what they are looking for. They may describe a product's features, demonstrate its use, or show various models.
- In addition to selling, most retail salespersons receive payments, bag purchases, give change, and issue receipts. They may also handle returns and exchanges of merchandise, wrap gifts, arrange for delivery of purchases, mark price tags, stock shelves, take inventory, and prepare displays.
- Some retail salespersons open or close cash registers. This includes counting the money, separating charge slips, and making deposits at the cash office. Salespersons are held responsible for the contents of their registers and repeated shortages can lead to dismissal.
- Salespersons must be able to recognize possible security risks and know how to handle such situations.

### Working Conditions

- Many retail salespersons work part time. Weekends, evening, and holiday work is expected.
- Vacation time is often restricted from Thanksgiving through mid-January because of the busy holiday season.
- Most salespersons work in clean, comfortable, well-lit stores. They often stand for long periods of time and may need supervisory approval to leave the sales floor.
- This job can be rewarding for those who enjoy working with people. Patience and courtesy are required, especially when the work is repetitious and the customers are demanding.

### Employment

- Retail salespersons held about 4.3 million jobs in 2004 in the United States and approximately 174,020 jobs in Pennsylvania.
- The largest employers of retail salespersons were department stores. Others worked for clothing stores, building supply stores and automobile dealerships.
- The following table includes the industries that employed the most retail salespersons in 2004 in Pennsylvania.

Industry	2004 Employment	Percent
Department Stores	28,680	16.5%
Clothing Stores	22,710	13.0%
Building Material & Supplies Dealers	13,160	7.6%
Automobile Dealers	11,670	6.7%
Other General Merchandise Stores	9,360	5.4%

### Job Outlook

- Employment of retail salespersons is expected to grow from approximately 174,020 in 2004 to approximately 187,680 in 2014. Retail salespersons can expect about 1,366 openings due to growth and about 6,326 replacement openings for approximately 7,692 total annual openings.
- Opportunities for retail salespersons are expected to be good. These opportunities will be best for part-time workers and temporary workers during peak selling periods. This is especially appealing to students, retirees, and those looking to supplement their income.
- Employment growth in retail sales can be affected during economic downturns. As sales volumes decline so does the demand for sales workers. However, because turnover is very high, employers often adjust employment levels simply by not replacing those who leave.

### **Earnings**

- Average hourly earnings of retail salespersons in Pennsylvania were \$10.58 in 2005. The entry-level rate in 2005 was \$6.54 while an experienced salesperson made \$12.60.
- Salespersons receive hourly wages, commissions or a combination of both. Under a commission system, they receive a percentage of the total sales that they make. This system offers workers the opportunity to significantly increase their earnings.
- Benefits may be limited in smaller stores, but in large establishments they are usually comparable to those offered by other employers. In addition, nearly all salespersons receive a discount on their store's merchandise.

### **Training, Other Qualifications and Advancement**

There are no formal education requirements for retail salespersons, although a high school diploma or equivalent is preferred. Employers look for people who enjoy working with others and have the ability to deal with difficult customers. Desirable characteristics include an interest in sales work, a neat appearance and strong communication skills. The ability to speak foreign languages may be helpful in areas where people from various cultures live and shop. Some employers may conduct a background check before hiring a salesperson.

Training programs vary depending on the size of the establishment. Most small stores use the experience of other employees or the manager to instruct new sales personnel. On the other hand, large stores offer a more formal training program that is conducted over several days. In either case, topics usually include customer service, security, store policies and cash register operation. Those selling certain products, such as cosmetics and cars, may be given additional specialized training. To continually provide the best service to their customers, employees are given periodic training sessions to update and refine their skills.

As salespersons gain experience and seniority, they usually acquire greater responsibility and may be given their choice of departments. This opportunity includes the potential for higher earnings and commissions. Although large companies prefer to hire college graduates as management trainees, motivated and capable employees without degrees can also advance to administrative or supervisory positions.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of retail salespersons include manufacturers' and wholesale sales representatives; services sales representatives; financial services sales representatives; counter and rental clerks; real estate agents and brokers; purchasing managers, buyers and purchasing agents; insurance sales agents; and cashiers.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- National Retail Federation, 325 7th St. NW, Suite 1100, Washington, DC 20004. Internet: <http://www.nrf.com>
- United Food and Commercial Workers International Union, 1775 K St. NW, Washington, DC 20006.  
Internet: <http://www.ufcw.org>
- National Automobile Dealers Association, Public Relations Dept., 8400 Westpark Dr., McLean, VA 22102-3591.  
Internet: <http://www.nada.org>
- Retail, Wholesale, and Department Store Union, 30 East 29th St., 4th Floor, New York, NY 10016.  
Internet: <http://www.rwdsu.org>



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## Sales Representatives

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SOC CODES: 41-4011, 41-4012 and 41-9031

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### Significant Points

- Employment opportunities are available in many different industries due to product diversity.
- Many sales representative jobs require a great deal of travel.
- Most firms emphasize a strong educational background.

### Nature of the Work

- Sales representatives market their company's products to manufacturers, wholesale and retail establishments, and government agencies. They discuss customers' needs, suggest how their merchandise, or services can meet those needs, show samples or catalogs and inform customers about prices and product availability. They may also take orders and resolve any problems or complaints with the merchandise.
- Depending on where they work, sales representatives have different job titles. However, these titles are often used interchangeably.

*Sales representatives* are employed directly by a manufacturer or wholesaler.

*Manufacturers' agents* are self-employed sales workers who contract their services to all types of manufacturing companies.

*Sales engineers*, or *industrial sales workers*, sell technical products for manufacturers and wholesalers. Aided by a laptop computer, they can answer technical and non-technical questions.

- Sales representatives who lack technical expertise often work with a technical expert. The technical expert will further explain the product and answer any questions or concerns.
- Obtaining new accounts is an important part of the sales representatives' job. They also analyze sales statistics, prepare reports and handle administrative duties. They must study literature about new and existing products and monitor the sales, prices and products of their competitors.

### Working Conditions

- Sales representatives typically work more than 40 hours per week. Work hours are often long and irregular but most sales representatives determine their own work schedule.
- Workers often spend a great deal of time traveling within their sales territories.
- Representatives are expected to meet goals or quotas set by their companies. Competition from representatives of other companies as well as from fellow workers is strong. Since their earnings depend on commissions, manufacturers' agents are under added pressure to maintain and expand their clientele.

### Employment

- Sales representatives held about 1.9 million jobs in 2004 in the United States and approximately 77,340 jobs in Pennsylvania.
- About 60 percent were employed with wholesale or retail trade establishments. Another 17 percent worked in manufacturing companies.
- The table below identifies the industries that employed the most sales representatives in 2004 in Pennsylvania.

Industry Group	2004 Employment	Percent
Wholesale & Retail Trade	46,320	59.9%
Manufacturing	13,730	17.8%
Services	7,250	9.4%
Construction	3,100	4.0%

### Job Outlook

- Employment of sales representatives in Pennsylvania is expected to grow from approximately 77,340 in 2004 to approximately 84,440 in 2014. Sales representatives can expect about 710 openings due to growth and about 2,042 replacement openings for approximately 2,752 total annual openings.

- An increasing diversity of goods and services to be sold will support job growth. However, increased effectiveness and efficiency of sales workers will temper this growth.
- Within manufacturing, job opportunities for manufacturers' agents should be somewhat better than those for sales representatives. Manufacturers are expected to continue outsourcing sales duties rather than using in-house personnel. Sales opportunities are likely to be best for products with strong demand.
- Employment opportunities and earnings may fluctuate because sales are affected by changing economic conditions, legislative issues, and consumer preferences. Prospects will be best for those with appropriate technical expertise as well as the personal traits necessary for successful selling.

### **Earnings**

- Most sales representatives earn a bonus or commission in addition to their salary. Commissions are usually based on the amount of sales, whereas bonuses usually depend on performance. Manufacturers' agents, on the other hand, are paid strictly on commission.
- Sales representatives are usually reimbursed for work-related expenses such as transportation, meals and lodging. Individuals often receive benefits such as health and life insurance, pension plans, vacation and sick leave, personal use of a company car, and frequent flyer mileage. Self-employed workers must pay for their own expenses and benefits.
- The following table includes the average annual, entry level, and experienced level wages in 2005 for sales representatives in Pennsylvania.

Occupational Title	Average Annual Wage	Entry Level Wage	Experienced Level Wage
Sales Representatives, Technical & Scientific Products	\$69,300	\$37,420	\$85,250
Sales Representatives	\$56,160	\$28,390	\$70,050
Sales Engineers	\$66,530	\$39,130	\$80,230

### **Training, Other Qualifications and Advancement**

The background needed for sales jobs varies by product line and market. Due to more technical and analytical job requirements, most firms now emphasize a strong educational background. Firms selling industrial products often require a degree in science or engineering in addition to some sales experience. However, many employers still hire individuals with previous sales experience who do not have a college degree.

Many companies have formal training programs that can last up to two years. In some programs, trainees rotate among jobs in plants and offices to learn all phases of production, installation, and distribution of the product. In others, they take formal classroom instruction at the plant, followed by on-the-job training under the supervision of a field sales manager. Some sales representatives complete certification courses to become Certified Professional Manufacturers' Representatives (CPMR).

As new representatives gain familiarity with the firm's products and clients, they are given increasing responsibility until they are eventually assigned their own sales territory. Promotion takes the form of a larger account or territory where commissions are likely to be greater. Experienced sales representatives may become sales trainers, sales supervisors or even district managers. Others find opportunities in purchasing, advertising or marketing research.

Workers must stay abreast of new merchandise and the changing needs of their customers. They often attend trade shows where new products and technologies are showcased. Conferences and conventions are held to meet other sales representatives and clients and to discuss new product developments. As businesses experience greater competition, increased pressure is placed upon sales representatives to produce faster.

Aspiring sales representatives should be goal-oriented and persuasive. They should be able to work well independently or as part of a team. Strong communication and problem-solving skills are highly valued traits. Sales representatives should have a pleasant personality and some physical stamina. They should also be willing to travel.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of sales representatives include advertising, marketing, sales, and public relations managers; insurance sales agents; purchasing managers, buyers and purchasing agents; real estate agents and brokers; securities, commodities and financial services sales representatives; and services sales representatives.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- Manufacturers' Agents National Association, PO Box 3467, 23016 Mill Creek Drive, Laguna Hills, CA 92654-3467. Internet: <http://www.manaonline.org>
- Manufacturers' Representatives Educational Research Foundation, P.O. Box 247, Geneva, IL 60134. Internet: <http://www.mrerf.org>
- Sales and Marketing Executives International, PO Box 1390, Sumas, WA 98295-1390. Internet: <http://www.smei.org>

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## Securities, Commodities & Financial Services Sales Agents

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SOC CODE: 41-3031

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### Significant Points

- Many employers prefer to hire college graduates.
- Employment growth will be very strong in the banking industry.

### Nature of the Work

- *Securities, commodities & financial services sales agents* help investors buy and sell financial products, such as stocks, bonds and insurance annuities. They often provide advice on investments and other financial matters.
- In general, securities, commodities, and financial services sales agents furnish clients with information about the advantages and disadvantages of an investment. They are commonly known as brokers, stockbrokers, registered representatives, account executives or financial consultants.

*Floor brokers* work on the floor of a securities exchange, such as the New York Stock Exchange. They negotiate the price, make the sale, and forward the purchase price back to their firm.

*Dealers* handle securities that are not traded on an exchange. They buy and sell directly from other dealers using their own funds or those of the firm. Then they re-sell the security to customers at a profit.

*Financial services sales agents* sell banking and related services. Additional duties are assumed as banks continue to offer complex financial services.

- The most important part of securities, commodities & financial services sales agents' jobs is finding clients and building a strong customer base.

### Working Conditions

- Established securities, commodities & financial services sales agents usually work 40 hours per week, including evening and weekend shifts. Newly hired workers put in additional hours to learn about the firm's products and study for the qualifying examinations.
- Work is usually performed in an office or call center environment. Others may work out of their homes.
- Considerable time may be spent meeting with clients, attending civic functions and participating in trade association conferences. In order to bring in more clients, some financial planners teach classes or put on informational seminars.
- When sales activity increases, working conditions can become very hectic and stressful.

### Employment

- Securities, commodities & financial services sales agents held about 280,900 jobs in 2004 in the United States and approximately 12,410 jobs in Pennsylvania.
- Over 29 percent were employed with security and commodity investment companies. Others worked for commercial banks and mortgage brokers. About 8 percent were self-employed.
- The following table includes the industries that employed the most securities, commodities & financial services sales agents in 2004 in Pennsylvania.

Industry	2004 Employment	Percent
Security & Commodity Investment Activity	3,650	29.4%
Depository Credit Intermediation	3,380	27.2%
Other Investment Pools & Funds	1,320	10.6%
Self-Employed	1,040	8.4%

### Job Outlook

- Employment of securities, commodities & financial services sales agents in Pennsylvania is expected to grow from approximately 12,410 in 2004 to approximately 13,560 in 2014. Securities, commodities & financial services sales agents can expect about 115 openings due to growth and about 141 replacement openings for approximately 256 total annual openings.

- As personal incomes continue to increase, people will continue to turn to securities, commodities & financial services sales agents for advice on their investments. However, employment levels will be adversely affected if the stock market or economy suddenly declines.
- Deregulation has allowed banks to offer an array of products, such as stocks and insurance. Therefore, employment growth will be very strong in the banking industry.
- Keen competition is expected as the number of qualified applicants outpaces the number of openings. Opportunities will be best in smaller firms.

### **Earnings**

- Average annual earnings of securities, commodities & financial services sales agents were \$85,990 in 2005. The entry-level wage in 2005 was \$36,170 while an experienced agent made \$110,900.
- Some securities, commodities & financial services sales agents receive a straight salary while others are paid solely on commissions, a percentage of their total product sales. However, most companies use a combination of salary and commissions. Others offer bonuses to those who exceed company goals.

### **Training, Other Qualifications and Advancement**

Even though many organizations have no formal educational requirements, employers often prefer to hire college graduates who have taken courses in business administration, economics and finance. For the most part, securities, commodities & financial services sales agents still learn their skills through on-the-job training.

Securities, commodities & financial services sales agents must be licensed to work in Pennsylvania. Newly hired representatives must register with the National Association of Securities Dealers (NASD). To prepare for the licensing examination, many employers provide on-the-job training or formal classroom instruction. After four months of employment, agents can apply to take the General Securities Registered Representative Examination. Applicants who pass this examination are issued a license and may begin buying and selling products. In order to maintain this license, sales agents are required to attend periodic continuing education courses.

Many organizations consider personal qualities more important than academic training. Employers seek mature applicants who have strong sales, interpersonal, and communication skills. Aspiring financial sales agents need self-confidence and a strong desire to succeed. Securities, commodities & financial services sales agents must be able to handle rejection and work independently. In addition, applicants need a good credit history and clean criminal record.

Advancement opportunities are usually limited to the assignment of additional or larger accounts. Some experienced workers advance to branch manager positions. Others become portfolio managers after passing the qualifying examinations. A few experienced securities, commodities & financial services sales agents advance to top management positions or even become partners in their firm.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of securities, commodities & financial services sales agents include insurance sales agents, financial advisors, and real estate agents & brokers.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- National Association of Securities Dealers, 1735 K Street, NW, Washington, DC 20006.  
Internet: <http://www.nasd.com>
- Securities Industry Association, 120 Broadway, 35<sup>th</sup> Floor, New York, NY 10271-0080.  
Internet: <http://www.sia.com>
- Certified Financial Planner Board of Standards, 1670 Broadway, Suite 600, Denver, CO 80202-4809.  
Internet: <http://www.cfp-board.org>

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## Services Sales Representatives

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SOC CODES: 41-3011, 41-9041 and 41-9091

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### Significant Points

- Job opportunities should be good for those with a college degree or a proven sales record.
- Most firms pay a combination of salary and commission.
- The Internet allows more work to be done outside the office.

### Nature of the Work

- Services sales representatives act as industry experts, consultants and problem solvers. There are several different categories of services sales representatives jobs.

*Outside services sales representatives* visit clients and prospects at their homes or offices, with or without having made an appointment. These individuals are also known as door-to-door, news, and street vendors.

*Inside services sales representatives* assist individuals interested in the company's services. Advertising sales agents are often included with these workers.

*Telemarketing sales representatives* make telephone calls to sell the company's service themselves or to arrange an appointment with outside sales representatives.

- Workers develop a list of prospective clients through telephone and business directories or by calling on new businesses in their assigned territory. Many obtain new accounts through referrals. Thus, their success hinges on developing a satisfied clientele and a respected reputation.
- All services sales representatives must explain how their service meets the client's needs and answer questions about the nature and cost of the service. If they fail to make a sale on the first visit, they may visit again, send letters, or make phone calls. After closing a deal, a services sales representative generally follows up to see that the purchase meets the customer's needs and to determine if additional services can be sold.
- Selling highly technical services involves complex, lengthy sales negotiations and extensive after-sale support. In these situations, sales reps often operate as part of a team. The entire sales process can take years. Selling less complex services involves simpler and shorter sales negotiations.
- Job duties of sales reps vary with the size of the employer. Large companies assign their services sales representatives to a specific territory, a specific line of services, or a specific type of client. In smaller companies, they may have additional responsibilities, such as marketing and public relations.

### Working Conditions

- Many services sales representatives work more than 40 hours per week. Most have the flexibility to set their own schedules as long as they meet their company's goals.
- Although the Internet allows more work to be done outside the office, many spend additional time on follow up and service calls than they did in the past.
- Considerable pressure is placed on services sales representatives to meet monthly sales quotas set by their companies. Some employers even have contests with prizes for those with the most sales.
- Some outside sales representatives spend a lot of time traveling while others never travel overnight. These employees are increasingly working out of home offices or sharing corporate office space with others.
- Inside sales representatives and telemarketers spend all their time in corporate offices. These offices can range from bright and cheerful customer showrooms to cramped and noisy rooms.

### Employment

- Services sales representatives held about 808,200 jobs in 2004 in the United States and approximately 25,810 jobs in Pennsylvania.
- About 36 percent were self-employed. Another 27 percent worked for business support firms. Others were employed with newspaper publishers and advertising agencies.
- The following table includes the industries that employed the most services sales representatives in 2004 in Pennsylvania.

Industry	2004 Employment	Percent
Self-Employed	9,200	35.6%
Business Support Services	6,960	27.0%
Newspaper, Book, & Directory Publishers	2,710	10.5%
Advertising & Related Services	1,900	7.4%

### Job Outlook

- Employment of services sales representatives in Pennsylvania is expected to decrease from approximately 25,810 in 2004 to approximately 24,250 in 2014. About 508 annual openings will result from replacement needs. Although no net employment growth is expected statewide, growth openings may occur in some areas.
- Employment growth may be tempered by the expanded use of voice mail, e-mail, portable phones and laptop computers that increase services sales representatives productivity while they are out the office.
- Each year, many discover they are unable to earn enough money and leave the occupation. Turnover is generally higher among those who sell non-technical services. Job opportunities should be good, especially for those with a college degree or a proven sales record.
- Some companies are cutting back on travel and on-site presentations. Instead, they are placing more emphasis on in-house sales via the Internet, direct calling and teleconferencing.
- Services sales representatives are often affected by changing economic conditions as well as consumer and business expectations. Therefore, opportunities and earnings may vary greatly from year to year.

### Earnings

- Some services sales representatives receive a straight salary while others are paid solely on commissions, a percentage of their total sales. However, most firms use a combination of salary and commissions. Many employers also offer bonuses, such as vacation trips and prizes, for those who exceed company quotas.
- Services sales representatives receive typical benefits packages. In addition, outside sales representatives may receive expense accounts to cover meals, travel, computers and office equipment for use while out of the office and even a company car.
- The following table includes the average annual, entry level, and experienced level wages in 2005 for services sales representatives in Pennsylvania.

Occupational Title	Average Annual Wage	Entry Level Wage	Experienced Level Wage
Advertising Sales Agents	\$22.90	\$10.61	\$29.04
Telemarketers	\$12.29	\$7.19	\$14.84
Door-To-Door Sales Workers & News/Street Vendors	\$12.39	\$5.92	\$15.62

### Training, Other Qualifications and Advancement

Some employers require that their services sales representatives have a college degree appropriate to the company's service, but requirements vary depending on the industry. Certification and licensing is also becoming more common. However, a high school diploma and a proven sales record is still enough for some companies. This is particularly true for smaller companies that sell non-technical services. Applicants can enhance their chances of being hired if they have taken some relevant college courses.

Many firms conduct intensive training programs to acquaint new sales representatives with the services and products of the firm, the history of the business, effective selling techniques and administrative policies. Sales representatives attend seminars that introduce new services and products, update their sales techniques or present effective ways to deal with prospective customers.

Aspiring sales representatives should be persuasive and have a pleasant, outgoing disposition. They should be self-starters who have the ability to thrive under pressure in order to meet sales goals. Strong communication and organization skills are essential. Sales representatives must be flexible and able to adjust to delays, problems and the schedules of others. Good grooming and a neat appearance are also important.

Sales representatives with leadership ability and good sales records may advance to supervisory and managerial positions. Frequent contact with people in other firms can also provide leads about job openings, which enhances advancement opportunities.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of services sales representatives include insurance sales agents, sales representatives, purchasing managers, buyers, purchasing agents, real estate agents, real estate brokers, sales engineers, securities sales representatives, and travel agents.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- Sales and Marketing Executives International, PO Box 1390, Sumas, WA 98295-1390.  
Internet: <http://www.smei.org>



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## Stock Clerks

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SOC CODE: 43-5081

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### Significant Points

- Employers require a high school diploma for this entry-level position.
- Increased use of computers and automated equipment will slow growth.

### Nature of the Work

- **Stock clerks** receive, unpack, check, sort, store and track merchandise, or materials. They use hand-held scanners connected to computers to mark items with identifying codes, so that inventories can be located quickly and easily.
- In larger establishments, stock clerks may be responsible for only one task. These clerks are sometimes called *inventory clerks*, *stock-control clerks*, *merchandise distributors*, *property custodians* or *storekeepers*.
- In smaller firms, stock clerks often perform more than one task, including shipping and receiving duties.
- Retail stock clerks bring merchandise to the sales floor and stock shelves. Meanwhile, those in stockrooms and warehouses are responsible for storing materials in bins, on floors or on shelves.

### Working Conditions

- A typical workweek for stock clerks is Monday through Friday. However, evening and weekend hours are standard in some industries.
- Some stock clerks work in warehouses, stockrooms and shipping/receiving rooms. Others spend time in cold storage rooms or on outside loading docks, exposed to the weather.
- Stock work can be very strenuous since most of a clerk's time is spent standing, bending, walking and stretching. Although stock clerks lift and carry smaller items by hand, the heavier items are moved with mechanical material handling equipment.

### Employment

- Stock clerks held about 1.6 million jobs in 2004 in the United States and around 74,150 jobs in Pennsylvania.
- About 78 percent were employed with wholesale and retail trade establishments – primarily with grocery, department and general merchandise stores. Manufacturing companies employed about 7 percent.

### Job Outlook

- Employment of stock clerks in Pennsylvania is expected to decrease from approximately 74,150 in 2004 to approximately 62,810 in 2014. About 2,744 annual openings will result from replacement needs. Although no net employment growth is expected statewide, growth openings may occur in some areas.
- The demand for stock clerks in manufacturing and wholesale trade is expected to slow with the growing use of computers for inventory control and the installation of automated equipment. Stock clerks working in grocery, general merchandise, department, apparel and accessories stores will be somewhat less affected.
- On the other hand, the increasing role of retail outlet, warehouse, catalogue, mail-order, telephone and Internet shopping services should bolster employment of stock clerks in these sectors of retail trade.

### Earnings

Average hourly earnings of stock clerks in Pennsylvania were \$10.34 in 2005. The entry-level rate in 2005 was \$6.77 while an experienced stock clerk made \$12.13.

### Training, Other Qualifications and Advancement

Stock clerk jobs are primarily entry-level positions that require a high school diploma and very little previous experience. Some employers prefer applicants who are familiar with computers and other electronic office equipment. Those who have taken business courses or have previous experience may have an advantage.

Training for most stock clerk positions is very informal. In fact, those whose sole responsibility is to bring merchandise to the sales floor or stock shelves need very little training. Others learn how to count and mark stock under the supervision of an experienced worker. Then, they start keeping records and taking inventory on their own.

Strength, stamina and the ability to perform repetitive tasks are important characteristics for stock clerks. Good oral and written communication skills are essential for those keeping inventory. Other clerical skills, such as typing and filing, could benefit stock clerks.

Advancement opportunities vary with the place of employment. In large firms, stock clerks can become invoice clerks, stock control clerks or procurement clerks. With additional training, some can even advance to jobs such as warehouse manager or purchasing agent.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of stock clerks include shipping, receiving & traffic clerks; distributing clerks; routing clerks; stock supervisors; and cargo checkers.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- National Retail Federation, 325 7th St. NW, Suite 1100, Washington, DC 20004. Internet: <http://www.nrf.com>

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## Ticket Agents & Travel Clerks

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SOC CODE: 43-4181

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### Significant Points

- Skills are learned through on-the-job training.
- Keen competition is expected as the supply of qualified applicants outpaces the number of openings.

### Nature of the Work

- Ticket agents work for companies that provide transportation services. They provide tourists with important travel information. Specific duties vary with employer and job title.
  - Reservation agents* answer telephone inquiries in large reservation centers. They help people plan trips and make reservations.
  - Transportation ticket agents* work in airports, train stations and bus depots. They sell tickets, assign seats and check baggage. Agents may answer inquiries, give directions, examine passports or check in pets.
  - Gate or station agents* assist boarding passengers in airport terminals. These workers direct passengers, check tickets, make boarding announcements and provide special assistance when needed.
  - Passenger rate clerks* sell tickets for regular bus routes and arrange chartered trips. Other duties include planning travel routes, computing rates and informing customers of necessary details.
- Most *travel clerks* are employed by membership organizations. They plan trips, prepare itineraries, calculate mileage and offer travel suggestions. These workers are sometimes known as *member services counselors* or *travel counselors*.

### Working Conditions

- Most ticket agents & travel clerks work a 40-hour week. Part-time positions are available. Evening, weekend and holiday shifts are common. Those with the least seniority are usually assigned to the less desirable shifts.
- Work areas are generally clean, well-lit, and quiet. However, many reservation agents work in large phone centers, which may be crowded and noisy.
- Reservation agents & travel clerks face stringent time constraints. Workers may feel stressed to meet quotas on the number of calls answered or reservations made.
- Ticket agents spend most of the day on their feet and are required to lift heavy baggage.

### Employment

- Ticket agents & travel clerks held about 163,000 jobs in 2004 in the United States and approximately 5,070 jobs in Pennsylvania.
- Over 73 percent were employed by airlines. Others worked for travel arrangement companies, lodging establishments, and membership organizations.

### Job Outlook

- Employment of ticket agents & travel clerks in Pennsylvania is expected to hold steady at approximately 5,070 through 2014. About 133 annual openings will result from replacement needs. Although no net employment growth is expected statewide, growth openings may occur in some areas.
- Keen competition is expected for jobs because the supply of qualified applicants is expected to exceed the number of job openings.
- A growing population will demand additional travel services. However, the employment growth of ticket agents & travel clerks may be offset by the significant impact of technology on worker productivity.

### Earnings

Average annual earnings of reservation & transportation ticket agents & travel clerks in Pennsylvania were \$29,730 in 2004. The entry-level wage in 2004 was \$18,280 while an experienced clerk made \$35,450.

### Training, Other Qualifications and Advancement

Most ticket agents & travel clerks learn their skills through on-the-job training. The requirements for these jobs are minimal. In fact, most entry-level positions only require a high school diploma or its equivalent. Certain ticket agent jobs may require some college education. In addition to educational requirements, employers look for applicants with good interpersonal skills and previous computer experience.

Most airline companies offer formal training programs. Along with classroom instruction, new airline ticket agents learn how to use the company's computer system to obtain schedule information, check seat availability and make reservations. After completing their training, workers may be tested on their knowledge of airport codes, airline regulations and safety procedures.

A professional appearance and pleasant personality are important traits for ticket agents & travel clerks who deal with the public. Employees who use telephones and the public address system should have a clear speaking voice and be fluent in the English language. Within the travel industry, individuals who speak a foreign language may have an advantage.

Many companies elect to fill openings by promoting individuals from within their organization. Experienced ticket agents & travel clerks can transfer to positions that have more responsibilities. Some even advance to supervisory positions. Additional training can help prepare ticket agents & travel clerks for promotion.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of ticket agents & travel clerks include new accounts clerks, bank tellers, receptionists, telephone operators, dispatchers, security guards, counter clerks, rental clerks, ushers and lobby attendants.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- Air Transport Association (ATA), 1301 Pennsylvania Ave. NW, Suite 1100, Washington, DC 20004-1707. Internet: <http://www.airlines.org>

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## Travel Agents

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SOC CODE: 41-3041

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### Significant Points

- Employers prefer to hire applicants who have some postsecondary training.
- Increased use of the Internet to book travel will contribute to employment decline.
- Travel agencies employed three-quarters.

### Nature of the Work

- *Travel agents* provide customers with information and advice about travel destinations. They make transportation and accommodation arrangements. In larger agencies, employees may specialize in a type of travel or place of destination.
- For international travelers, agents may provide additional information on customs regulations and currency exchange rates.
- Many travel agents consult published and computer-based sources for information on flight times, fares, and hotel ratings. Recommendations are also made based on an agent's own travel experiences.
- Telemarketing, direct mail and the Internet are used to promote travel services. Special presentations are also made to businesses and special interest groups.

### Working Conditions

- Travel agents, especially those who are self-employed, frequently work long hours. Vacation seasons and holiday periods can be very hectic.
- Work is usually done from behind a desk although technological advancements do allow some agents to work from home.

### Employment

- Travel agents held about 102,700 jobs in 2004 in the United States and around 4,320 jobs in Pennsylvania.
- About 74 percent worked for travel agencies. Others were employed with membership organizations or were self-employed.

### Job Outlook

- Employment of travel agents in Pennsylvania is expected to decrease slightly from approximately 4,320 in 2004 to approximately 4,280 in 2014. About 97 annual openings will result from replacement needs. Although no net employment growth is expected statewide, growth openings may occur in some areas.
- Technological developments, such as the Internet and electronic ticketing machines, allow people to make their own travel arrangements. As a result, job opportunities may be limited.
- The travel industry is sensitive to economic downturn and international crisis. Job openings will fluctuate during these periods of time.

### Earnings

- Average annual earnings of travel agents were \$30,320 in 2005. The entry-level wage in 2005 was \$19,100 while an experienced travel agent made \$35,930.
- Initially, self-employed travel agents have low earnings. Furthermore, they do not enjoy the same benefits as salaried agents.
- Travel agents often receive reduced rates for transportation and accommodations. In addition, agents may take company-sponsored trips to learn about a particular vacation site.

### Training, Other Qualifications and Advancement

Although the minimum educational requirement for travel agents is a high school diploma or equivalent, many employers prefer to hire applicants with formal training. Vocational schools, adult education programs, and community colleges offer training. Some four-year colleges offer degrees in travel and tourism. The American Society of Travel Agents (ASTA) also offers a correspondence course that provides a basic understanding of the travel industry. Beyond formal education, many organizations also provide on-the-job training for their employees. Technology and computerization are having a profound effect on the work of travel agents, however, and formal or specialized training is increasingly important.

Previous travel experience is an asset for aspiring travel agents. Organization is needed to compile information and plan a customer's itinerary. Patience and accuracy are also important traits. Strong writing, computer and sales skills are essential.

Many travel agents start out as reservation clerks or receptionists. In time, they take on additional work and eventually assume the duties of an agent. Within larger organizations, experienced travel agents can advance to managerial positions. Others open their own agencies, after gaining formal approval from suppliers or corporations. In order to obtain approval, an agency must be financially sound and employ at least one experienced travel agent.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of travel agents include tour guides, meeting planners, airline reservation agents, rental car agents, and travel counselors.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- The Travel Institute, 148 Linden St., Suite 305, Wellesley, MA 02482. Internet: <http://thetravelinstitute.com>
- American Society of Travel Agents, Education Department, 1101 King St., Alexandria, VA 22314. Internet: <http://www.astanet.com/>

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## Upholsterers

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SOC CODE: 51-6093

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### Significant Points

- Skills are gained through on-the-job training.
- Opportunities should be best for those with previous experience.

### Nature of the Work

- *Upholsterers* are responsible for adding upholstery to new furniture and repairing items. Some work with automobile upholstery and convertible tops.
- Many upholsterers use hand tools as well as specialized equipment, such as webbing stretchers, upholstery needles, and sewing machines.
- The most important part of the furniture is the frame. Webbing is tightly stretched across the solid frame and securely fastened. Springs are positioned on the webbing until they compress evenly. Burlap or a pad of compressed fiber is stretched over the springs to ensure they hold their shape. Cardboard and foam filler is used to form a smooth, rounded surface.
- Once the filler has been added, fabric is measured and cut for all furniture sections. The pieces are sewn together and the final item is tacked, stapled, or glued to the frame.
- When restoring furniture, upholsterers must first discard the worn covering and make any necessary repairs. To preserve the original shape of the item, worn sections of padding are re-used whenever possible.
- Workers who concentrate on re-upholstery and customized work perform a broader range of tasks than individuals who produce new furniture.

### Working Conditions

- Most upholsterers work in shops or factories that are spacious, well-lit, and well ventilated. However, some are cramped and dusty.
- Upholsterers stand for most of the workday. They may also do a lot of bending and heavy lifting.
- Although upholstery work is not very dangerous, most workers wear protective gloves and clothing when using sharp tools and handling furniture.

### Employment

- Upholsterers held about 53,300 jobs in 2004 in the United States and approximately 1,480 jobs in Pennsylvania.
- Over 40 percent worked in upholstery and furniture repair shops. About 13 were employed with furniture manufacturing companies. Almost 1 in 5 were self-employed.
- The following table includes the industries that employed the most upholsterers in 2004 in Pennsylvania.

Industry	2004 Employment	Percent
Household Goods Repair & Maintenance	600	40.2%
Self-Employed	280	18.7%
Household & Institutional Furniture	200	13.2%
Office Furniture & Fixtures Mfg	110	7.4%
Warehousing & Storage	80	5.7%

### Job Outlook

- Employment of upholsterers in Pennsylvania is expected to decrease from approximately 1,480 in 2004 to approximately 1,210 in 2014. About 38 annual openings will result from replacement needs. Although no net employment growth is expected statewide, growth openings may occur in some areas.
- The use of new, relatively inexpensive furniture will reduce the demand for upholsterers. However, there will be a steady demand for workers who restore valuable furniture.
- Opportunities will be best for those with previous work experience.

### **Earnings**

Average annual earnings of upholsterers in Pennsylvania were \$28,350 in 2005. The entry-level wage in 2005 was \$14,690 while an experienced upholsterer made \$35,180.

### **Training, Other Qualifications and Advancement**

Upholstery skills are usually gained through on-the-job training, which usually lasts about six weeks but is often supplemented with three years of additional production work. Highly skilled upholsterers have eight to 10 years of practical experience. They generally concentrate on higher priced custom-made and re-upholstered pieces.

When hiring helpers, employers look for individuals with some knowledge of the trade. Basic training is available through high schools, vocational-technical schools and community colleges. These programs teach sewing machine operation, measuring, cutting, springing, frame repair, tufting and channeling. Some programs also offer courses in business and interior design.

Successful upholsterers have an eye for detail, a flair for color and knowledge of fabrics. Manual dexterity and good coordination are also important traits. Stamina and strength are needed to lift and move heavy furniture.

In large shops and factories, upholsterers may advance to supervisory positions. For a small investment, experienced workers may open their own shop. However, the upholstery business is extremely competitive and operating a successful shop can be difficult.

### **Related Occupations**

Workers in other occupations with responsibilities and duties related to those of upholsterers include pattern and model makers, fur cutters, assemblers, fabricators, furniture finishers, and casket coverers.

### **Sources of Additional Information**

- Pennsylvania CareerLink. Internet: <http://www.pacareerlink.state.pa.us>
- Accrediting Commission of Career Schools and Colleges of Technology, 2101 Wilson Blvd., Suite 302, Arlington, VA 22201. Internet: <http://www.accsct.org>
- American Textile Manufacturers Institute, Inc., 1130 Connecticut Ave. NW, Suite 1200, Washington, DC 20036-3954. Internet: <http://www.atmi.org>